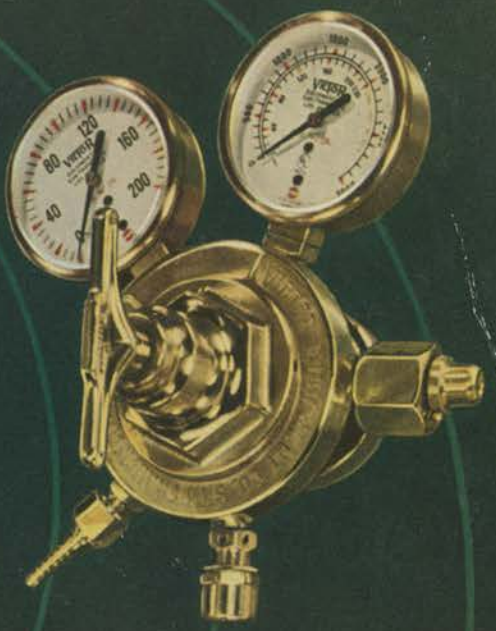

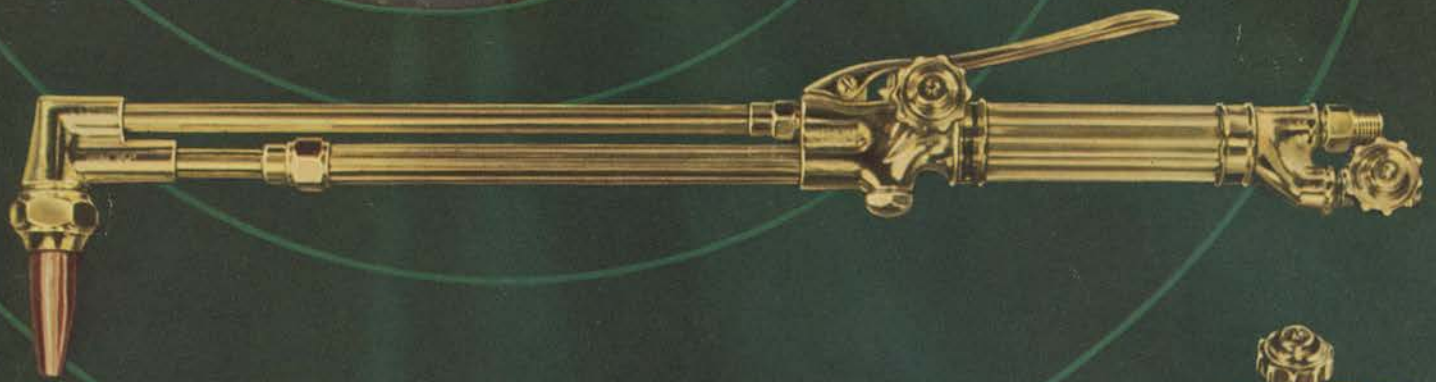

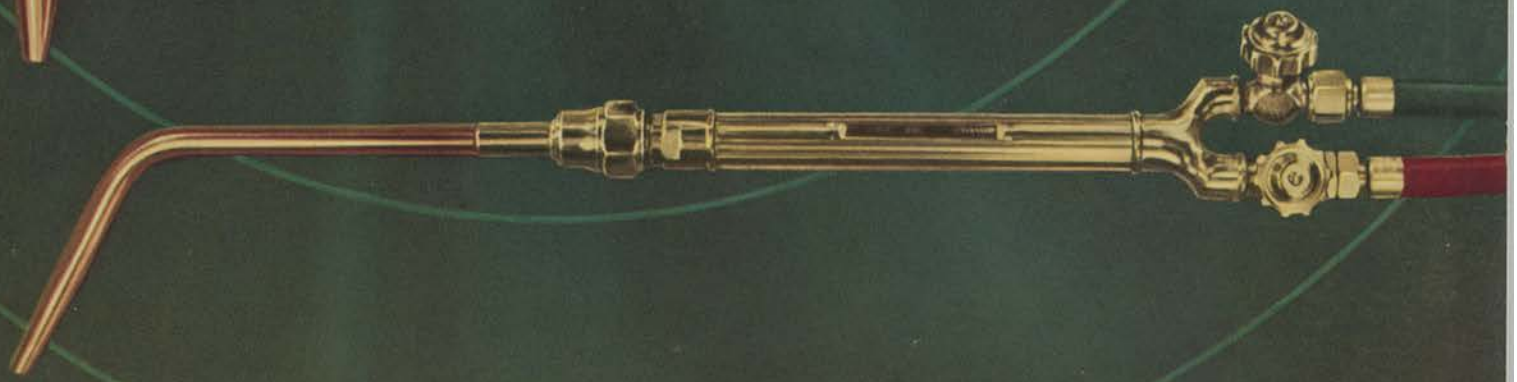

MUNSELLE SUPPLY CO. INC.
1004 East First Street KI 2-0612
Alameda

VICTOR Welding and Cutting Equipment

T. Morris 2025

VICTOR

Means Quality Welding and Cutting Equipment to Thousands of Satisfied Users

The practical design, sound construction, and skilled workmanship found in VICTOR apparatus is the result of conscientious efforts to make continuous improvements for the user's benefit.

The purpose of this catalog is to present complete information on VICTOR apparatus through carefully planned illustrations and charts to make selection and ordering as easy as possible.

Should any questions arise regarding the equipment in this catalog or special equipment not listed, please feel free to contact us for further information.

VICTOR EQUIPMENT COMPANY

844 FOLSOM STREET
SAN FRANCISCO 7
CALIFORNIA

Catalog 20
7-53 CW
Printed in U.S.A.

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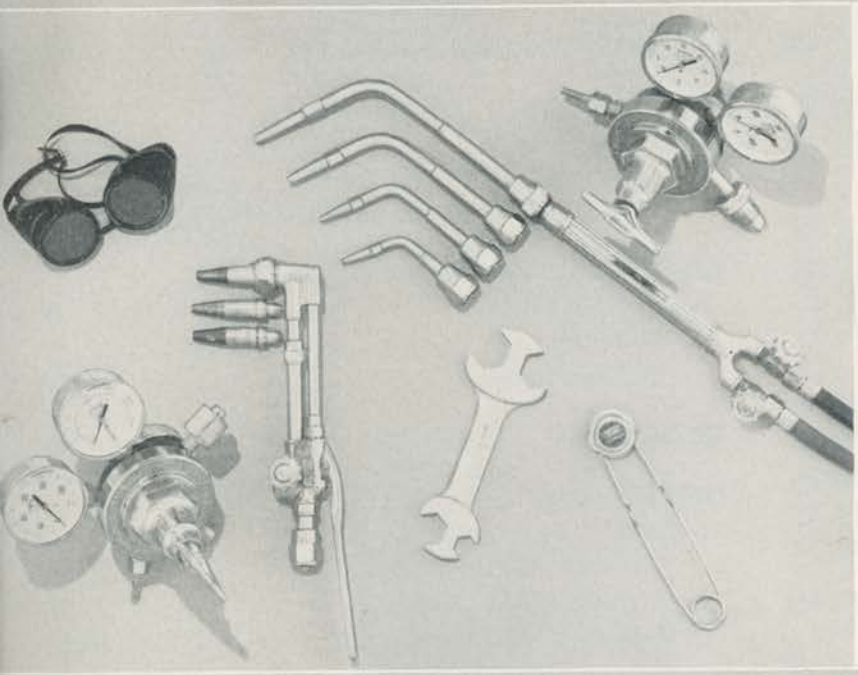
VICTOR WELDING AND

UNIT WC-1 RECOMMENDED AS A LARGE CAPACITY INDUSTRIAL UNIT



Victor Two-stage Oxygen Regulator, Model VTS43-967

Victor Two-stage Acetylene Regulator, Model VTS41-970

Victor Welding Torch Butt, Model 310

Victor Welding Torch Nozzles, Type 1, Sizes 1, 2, 3 and 4

Victor Cutting Attachment, Model 2450

Victor Cutting Tips, Type 1-101, Sizes 00, 1 and 2

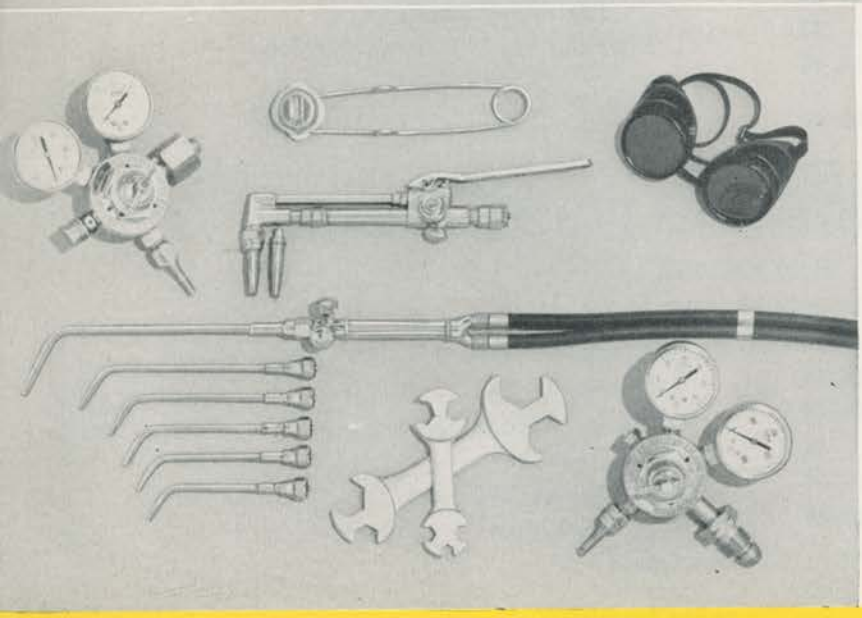
Victor RT-20 4-way General Wrench

AU-1 Accessory Unit:

- Welding Goggles, Spark Lighter
- A 25-ft. length of ¼-in. Dual Oxygen and Acetylene Hose

NOTE—For other regulator inlet connections see pages 54-55.

UNIT WC-86 RECOMMENDED AS A "TECHNICIAN AND HOBBY UNIT"



Victor Single-stage Oxygen Regulator, Model SR20-967

Victor Single-stage Acetylene Regulator, Model SR21-970

Victor Welding Torch Butt, Model J27

Victor Welding Torch Nozzles, Type 17, Sizes 000, 00, 0, 1, 2, and 4

Victor Cutting Attachment, Model 550-J

Victor Cutting Tips, Type 5-101, Sizes 0 and 1

Victor RT-20 and RT-50 General Wrenches

AU-4 Accessory Unit:

- Welding Goggles, Spark Lighter
- A 12½-ft. length of 3/16-in. Dual Oxygen and Acetylene Hose

NOTE—For other regulator inlet connections see pages 54-55.

CUTTING UNITS.....

UNIT WC-82 RECOMMENDED FOR MEDIUM DUTY

Victor Single-stage Oxygen Regulator, Model SR43-967

Victor Single-stage Acetylene Regulator, Model SR41-970

Victor Welding Torch Butt, Model 315

Victor Welding Torch Nozzles, Type 4, Sizes 0, 1, 3, 5, and 7

Victor Cutting Attachment, Model C1450

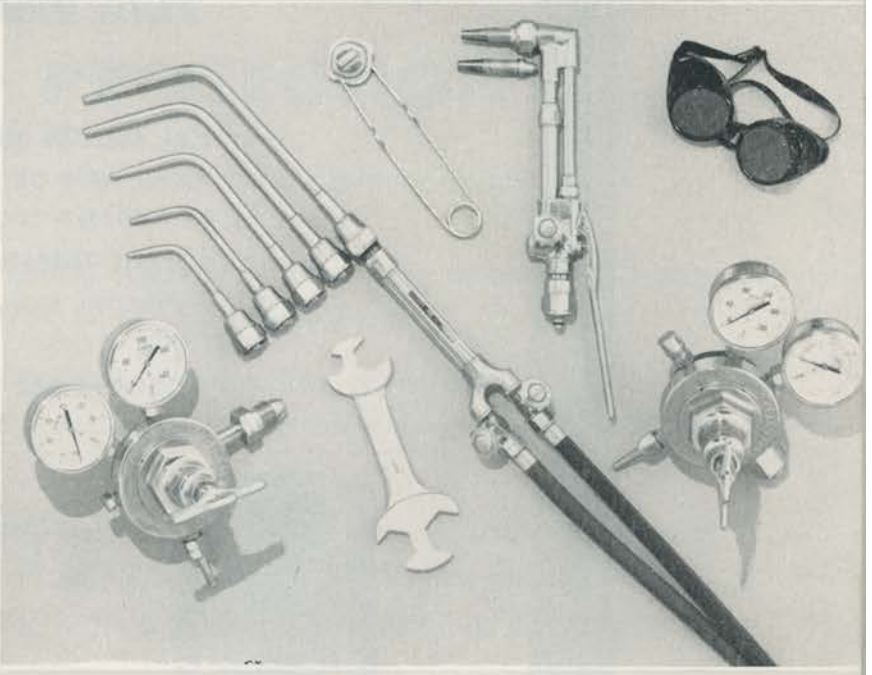
Victor Cutting Tips, Type 3-101, Sizes 0 and 1

Victor RT-20 4-way General Wrench

AU-1 Accessory Unit:

- Welding Goggles, Spark Lighter
- A 25-ft. length of ¼-in. Dual Oxygen and Acetylene Hose.

NOTE—For other regulator inlet connections see pages 54-55.



UNIT WC-92 RECOMMENDED AS AN AUTOMOTIVE AND GAS PIPE LINE WELDING UNIT

Victor Single-stage Oxygen Regulator, Model SR95-967

Victor Single-stage Acetylene Regulator, Model SR96-970

Victor Welding Torch Butt, Model 100

Victor Welding Torch Nozzles, Type 13, Sizes 00, 1, 2 and 4

Victor Cutting Attachment, Model 550-100

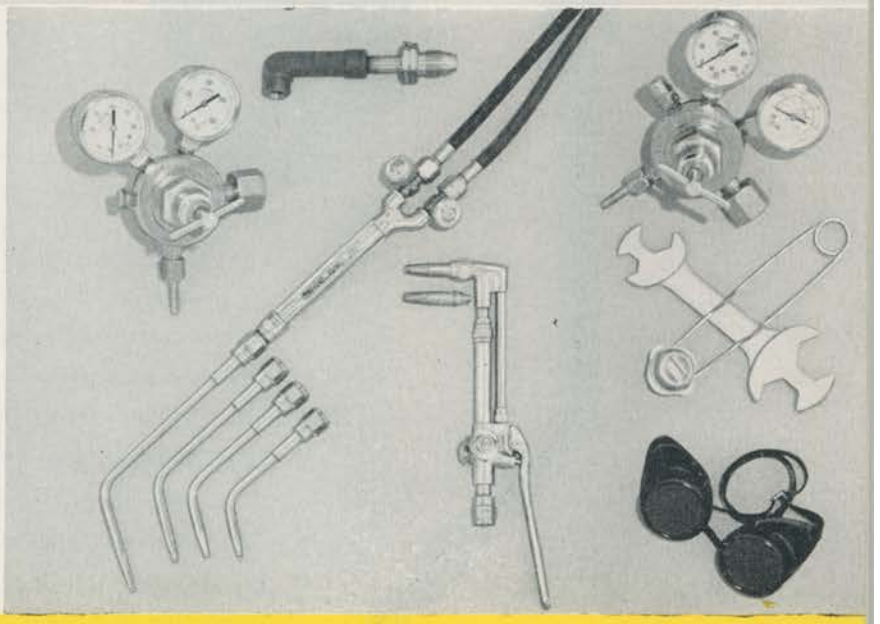
Victor Cutting Tips, Type 5-101, Sizes 0 and 1

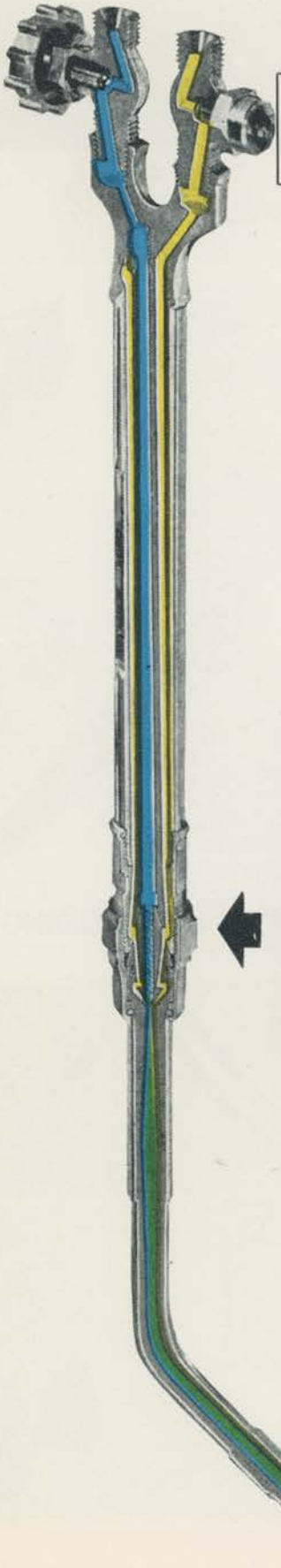
Victor RT-20 4-way General Wrench

AU-2 Accessory Unit:

- Welding Goggles, Spark Lighter
- A 25-ft. length of 3/16 in. Dual Oxygen and Acetylene Hose

NOTE—For other regulator inlet connections see pages 54-55.





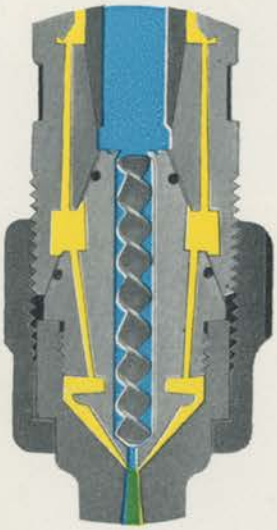
ALL VICTOR TORCHES HAVE THESE ACCURATE, STURDY AND RELIABLE GAS CONTROL VALVES.

VICTOR Torches

Have Distinctive Quality Features

TYPICAL BUILT-IN QUALITY FEATURES OF VICTOR TORCHES are clearly illustrated in the cut-away section of a 300 Series welding torch with a Type 1 welding nozzle.

A COMPLETE THREADED ASSEMBLY provides a sturdy and practical type of construction, easy to maintain when parts become damaged or worn after long service.



THE VICTOR SPIRAL MIXER AND GAS PROPORTIONER PRODUCES EFFICIENT FLAMES. The enlarged cross section illustrates the principal of the scientifically designed gas mixer used in all VICTOR welding and cutting torches. The balanced proportions of the passages and orifices together with the positive action of the spiral completely and thoroughly mix the gases for safe, efficient and economical operations.

POSITIVE RESISTANCE TO FLASH BACK and backfire is provided by this time-tested and proven design.

"O" TYPE SEALING RINGS provide a hand-tight leak proof cone end joint.

FLAME STABILITY IS ASSURED BY ACCURATE BALL POINT CONTROL VALVES. The polished stainless steel ball is precisely fitted into an Everdur stem providing freedom of rotational movement for reliable seating—free from galling and sticking. The sturdy ribbed control wheel is securely and permanently fastened to the stem by peening over a section of the stem extending through the wheel. A simple and effective packing gland design insures smooth gas-tight operation over a long useful life and also holds the stem firm to prevent annoying valve setting changes.

DESCRIPTIONS AND SPECIFICATIONS of all VICTOR torches are carefully listed and illustrated on the following pages to help you to choose the most suitable equipment for your job.

U-L LISTED Victor welding and cutting torches are covered by the Factory Inspection and Label Service Program of Underwriters' Laboratories, Inc.

All Victor Welding Torch Nozzles and Cutting Attachments Have

"O" TYPE SEALING RINGS And CONE END PROTECTION

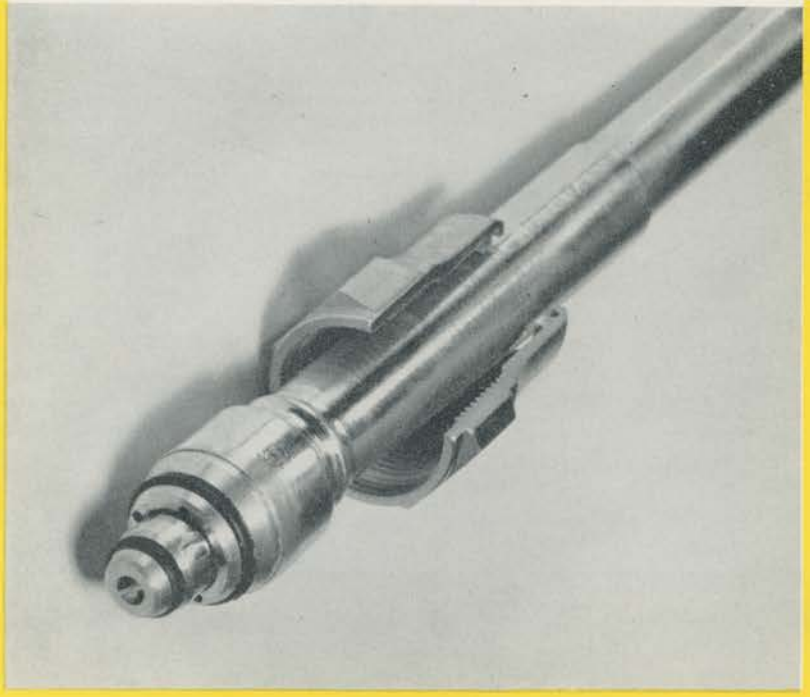
FOR QUICK - HAND-TIGHT - TROUBLE-FREE CONNECTIONS

QUICK - EASY CHANGES of welding nozzles and cutting attachments can be made without the use of a wrench. Hand tightening of connection nuts provides an effective, leakproof seal.

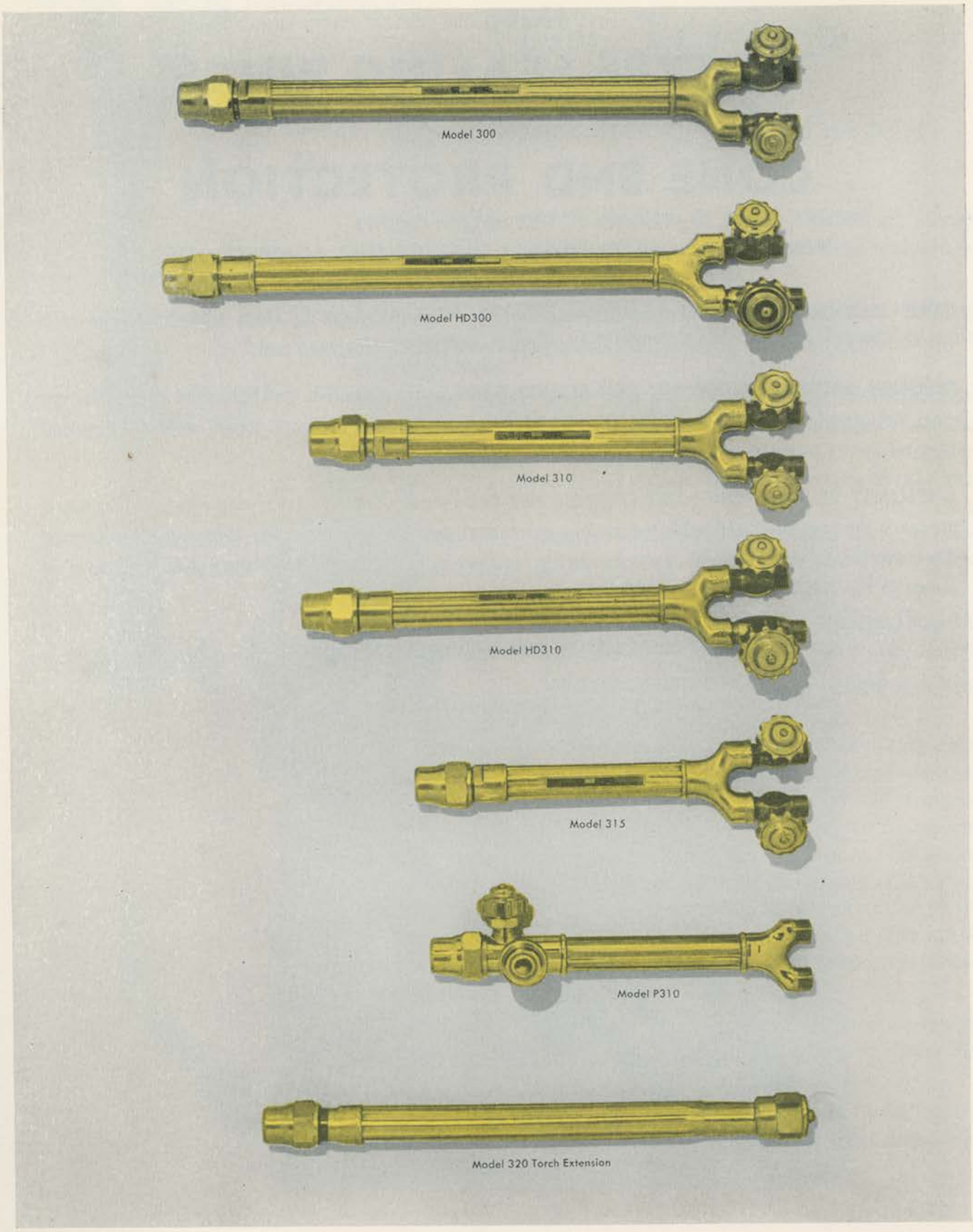
PRECISION MOLDED, RESILIENT "O" TYPE SEALING RINGS insure a positive, gas-tight joint even under the most difficult working conditions. VICTOR "O" Type sealing rings are accurate, tough, wear-resistant and easy to replace after serving a long, useful life.

A SPECIALLY DESIGNED PROTECTIVE COUPLING NUT has a patented, built-in snap ring which springs into a groove in the cone body and holds the nut in a permanent position to protect the cone end from damage due to accidental dropping, etc. It can be readily removed by springing the snap ring out of the groove as shown in the illustration below.

IT COSTS LESS TO OWN AND OPERATE VICTOR



Model 300 Series Welding Torches



Model 300 Series Welding Torches

WIDE RANGE OF MODELS. The Model 300 Series Welding Torch butts are made in six styles to meet the requirements of the operator or the work for length, weight, capacity, and location of gas control valves. They can be used with a very complete selection of single and multiflame nozzles, cutting attachments and torch extensions to perform a complete range of welding, brazing, heating, melting, cutting, gouging and descaling operations.

STURDY CONSTRUCTION FEATURES: Rugged bronze alloy head—comfortable hand-fitting ribbed handle—heavy seamless internal tube—dense die forged brass body "Y". Durable and accurate gas control valves with Everdur valve stems, stainless steel ball valve seats, ribbed grip wheels, and a reliable valve packing design which holds valve settings steady.

EASE OF SERVICE is assured by the precision threaded assembly which simplifies occasional repair and maintenance operations.

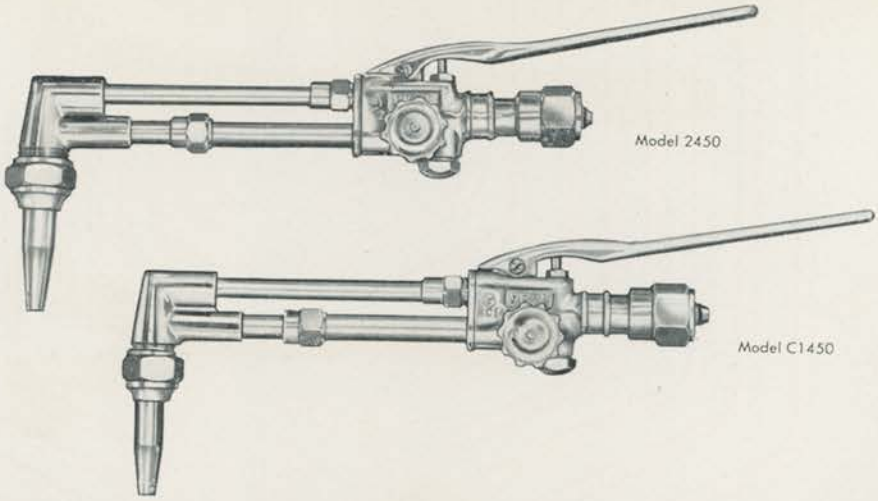
SPECIFICATIONS

Model	Length	Weight	Hose Connection*	Applications
315	9"	18 oz.	"B" (9/16"-18 threads)	A compact torch ideal for general purpose welding and cutting.
310	11"	21 oz.	"B" (9/16"-18 threads)	A medium weight and length torch for all around use.
300	14"	24 oz.	"B" (9/16"-18 threads)	A long torch for the user of larger welding and heating nozzles, etc.
HD310 **HD300**	11" 14"	28 oz. 32 oz.	"B" (9/16"-18 threads)	Heavy duty models with high capacity fuel gas valves for large gas flows.
P310	9"	22 oz.	"B" (9/16"-18 threads)	For pipeline and similar operations. The location of the gas control valves are at the forward end of the torch, allowing "one-hand" adjustment by the thumb and forefinger of the hand holding the torch.
320	12"	19 oz.		Torch extension for all above torches.

*Oxygen R.H., Fuel Gas L.H. threads.

Model 2450 and C1450 Cutting Attachments

FOR USE ON MODEL 300 SERIES WELDING TORCHES



A USEFUL AND FLEXIBLE RANGE of general purpose cutting operations is assured by the adequate capacity of these sturdy, well-balanced cutting attachments. The Model 2450 uses "Standard" type cutting tips up to size 5 for cutting up to approximately 8". The Model C1450 uses the smaller type cutting tips for the "C" type torches up to size 4 for cutting up to approximately 6". (See cutting tip data on pages 65-66.

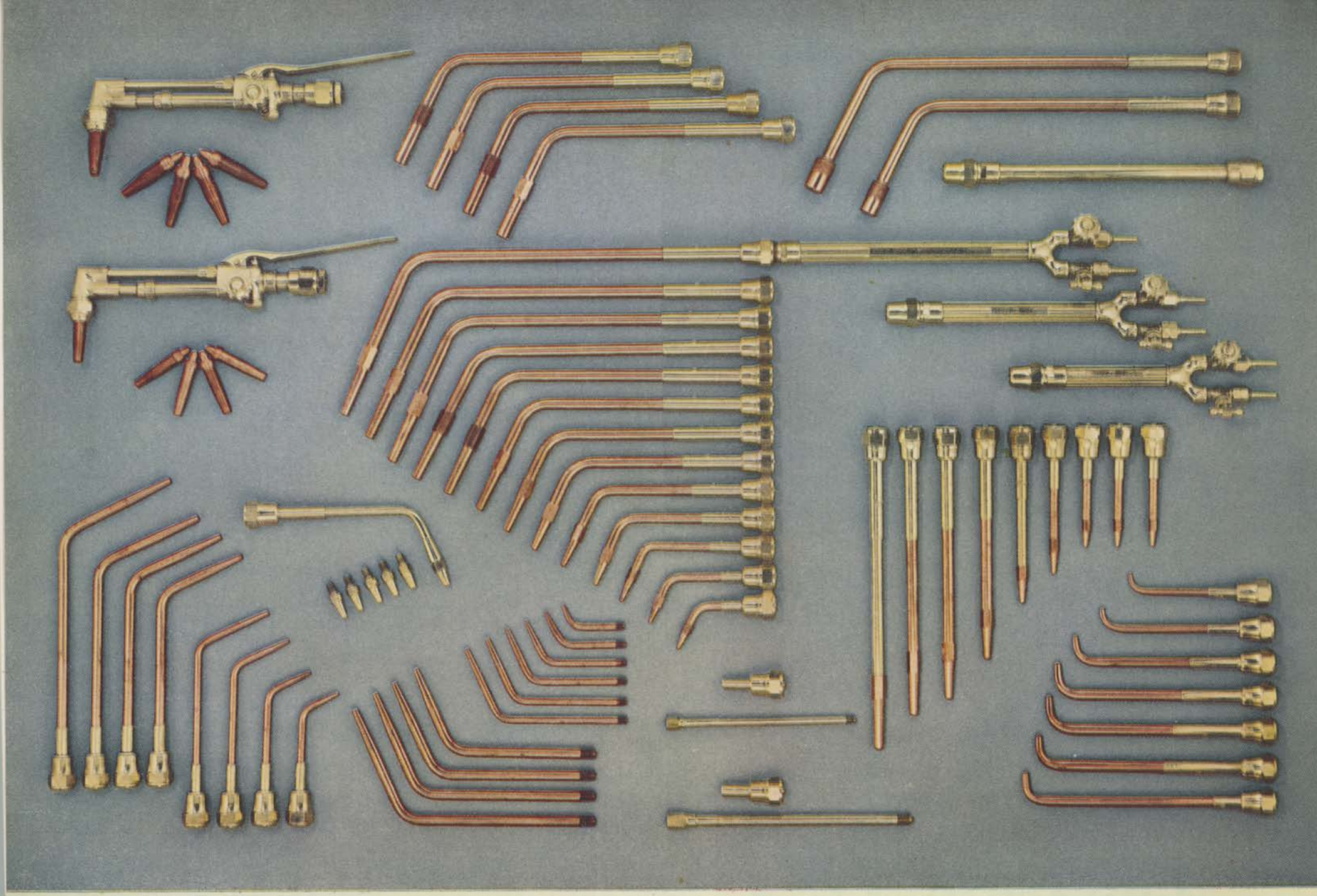
QUALITY CONSTRUCTION FEATURES include die forged head and body—rugged oxygen control valves, the cutting oxygen valve having an "O" ring type gland for long, leak-tight service—and a sturdy, precision threaded assembly for ease of service or change of head angle. Cutting attachments are furnished with a 90° head unless otherwise specified. Also available in 75°, 45° and 180° head.

LOW PRESSURE FUEL GAS. Model 2450-LPA cutting attachment is available at no extra cost with a special injector type mixer for use on low pressure fuel supplies.

AN EXCELLENT SELECTION of cutting tips for the Model 2450 will be found on pages 32-34, and for the Model C1450 on page 35.

SPECIFICATIONS

Model	Length	Weight	Cutting Range
2450	10½"	2 lbs.	Approximately 8"
C1450	10½"	2 lbs.	Approximately 6"



VICTOR Welding Torch Nozzles and Tips

for use with

Model 300 Series Welding Torch Butts

WIDE AND FLEXIBLE SELECTION. This series of nozzles and tips for the Model 300 series welding torch butts offers a complete choice of types and sizes for welding, heating, brazing, descaling, flame priming, soldering etc., which are completely interchangeable on any Model 300 series welding torch butt.

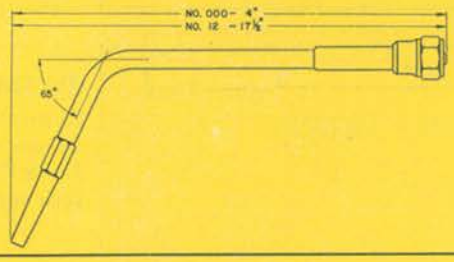
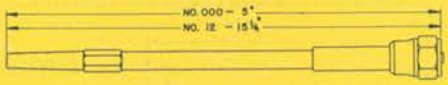
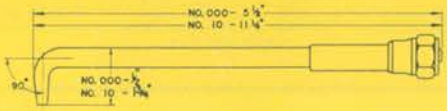
QUALITY MATERIALS AND ACCURATE CONSTRUCTION. VICTOR welding tips used on the Type 1 style of nozzles are made of heat-resistant tellurium copper alloy to give longer wear and service. Swaged one-piece elbow tips used on the Type 4 style of nozzles are made of heat and wear-resistant heavy gauge copper tubing. Tips and elbows are swaged mirror smooth over precision mandrels to give exact duplication of dimensions and uniform flame characteristics. The time-proven VICTOR spiral gas mixer principal assures maximum safety, efficiency and economy. Precision molded "O" type sealing rings provide a gas tight fit under all working conditions.

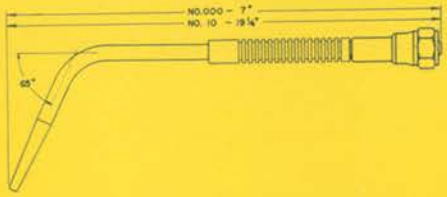
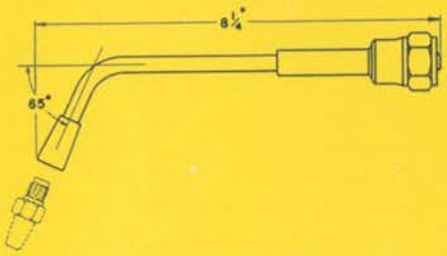
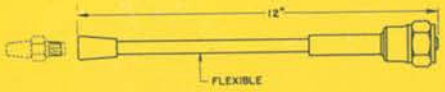
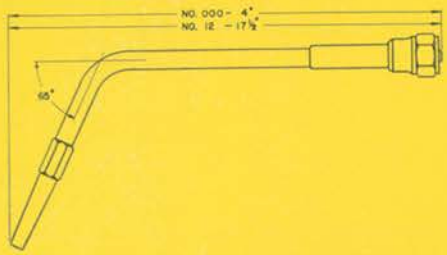
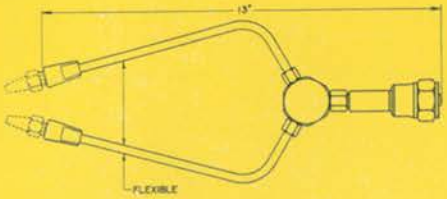
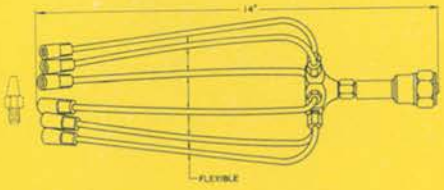
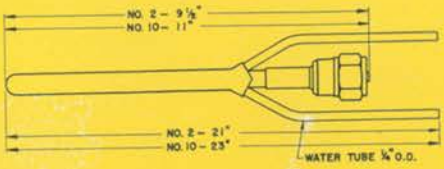
FLAME CHARACTERISTICS TO FIT THE WORK. Most VICTOR welding nozzles have long cone flame characteristics to produce the concentration of heat needed for general welding or brazing applications. For some applications such as hard facing, flame hardening, and some welding and brazing operations, bulbous cone flames are used to give an even heat over a larger area. This type of flame is available in the Type 1A nozzles and in the interchangeable tips Type A-1A and A-7A listed on page 14.

FLAME PORT SIZES. All VICTOR welding nozzles of the same size, regardless of type, have the same flame orifice size. Refer to the last pages of this catalog for orifice sizes, recommended operating pressures, and tip size suggestions for various metal thicknesses.

GENERAL PURPOSE

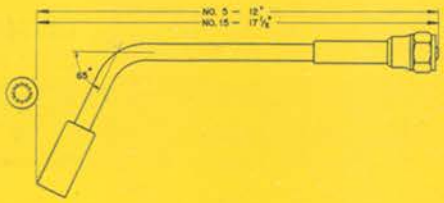
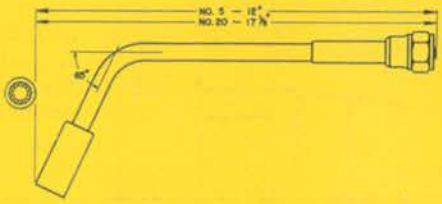
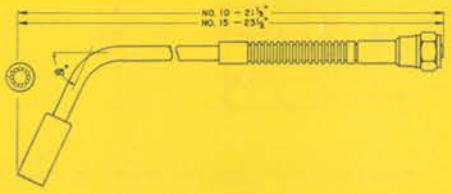
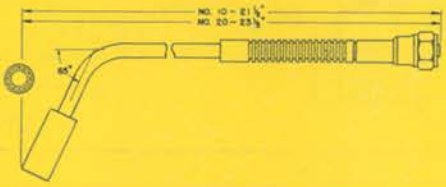
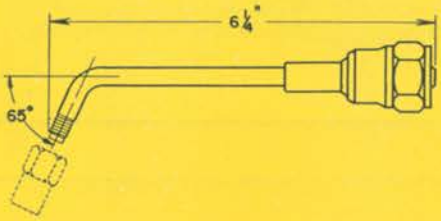
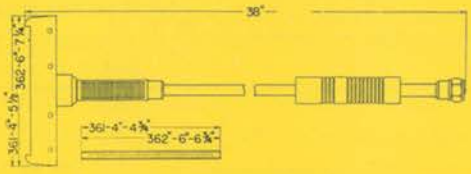
USE WITH TORCH BUTTS: 300, 310, 315, P310, HD300, HD310

TYPE NUMBER	AVAILABLE SIZES		DESCRIPTION
1	000 TO 12		**OXYGEN-ACETYLENE** Renewable swaged tip ends 000-A-1 to 12-A-1. General welding and preheating. Flame Characteristic—long cone. Each nozzle provided with individual mixer.
1A	1 TO 12		**OXYGEN-ACETYLENE** Same nozzle as Type 1 except bulbous cone.
2	000 TO 12		**OXYGEN-ACETYLENE** Same nozzle as Type 1 except straight. Flame Characteristic—long cone.
4	000 to 10		**OXYGEN-ACETYLENE** Swaged copper elbow tips—one piece. General welding and preheating. Flame Characteristic—long cone. Each tip provided with individual mixer for best flame performance.
4-CD-4	MIXER ONLY		**OXYGEN-ACETYLENE** Uses 1 piece swaged elbow tips 000-AB-4 to 4-AB-4. Flame Characteristic—long cone.
8-CD-4			Uses elbow tips 5-AB-4 to 8-AB-4. Flame Characteristic—long cone. (See page 14.)
5	000 TO 10		**OXYGEN-ACETYLENE** Short bent 1-piece swaged elbow tips. Essentially the same as Type 4 but bent for use in confined spaces.

TYPE NUMBER	AVAILABLE SIZES		DESCRIPTION
6	000 to 10		**OXYGEN-ACETYLENE** Chrome plated, spatter resistant swaged elbow tips with airadiator unit to radiate excessive heat away from the mixer. Flame Characteristic—long cone.
7	NOZZLE WITHOUT TIP		**OXYGEN-ACETYLENE** Uses tips sizes 000-A-7 to 5-A-7 (long cone) or tips 1-A-7A to 5-A-7A (bulbous cone). (See page 14.) General welding and brazing.
8	NOZZLE WITHOUT TIP		**OXYGEN-ACETYLENE** Flexible nozzle—can be bent to desired shape. Uses tips 000-A-7 to 5-A-7 (long cone) or tips 1-A-7A to 5-A-7A (bulbous cones). General welding and brazing.
34	00 TO 12		**OXYGEN-ACETYLENE (Low Pressure)** Renewable tip ends 000-A-1 to 12-A-1. (See page 14.) General welding and preheating. Flame Characteristic—long cone. Each nozzle provided with an individual mixer.
38	2 TIP NOZZLE WITHOUT TIPS		**OXYGEN-ACETYLENE** Uses tips 000-A-7 to 5-A-7 (long cone) or tips 1-A-7A to 5-A-7A (bulbous cone). (See page 14.) Can be bent to desired position. For heating, silver brazing, etc.
45	6 TIP NOZZLE WITHOUT TIPS		**OXYGEN-ACETYLENE** Uses tips 000-A-7 to 3-A-7 (long cone) or tips 1-A-7A to 3-A-7A (bulbous cone). (See page 14.) Each arm may be bent to desired position for heating, silver brazing, etc.
44	2 TO 10		**OXYGEN-ACETYLENE** Water cooled tips for extremely hot work where ordinary tips over-heat very quickly. Water jacketed tip stays cool and efficient under severe heat. Made on order only.

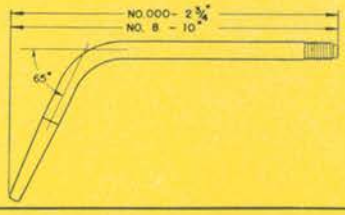
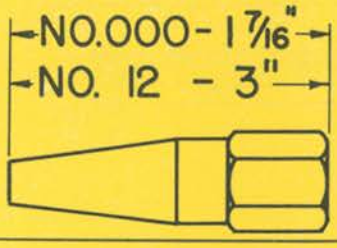
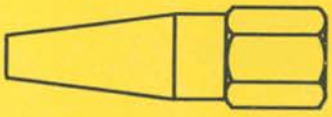
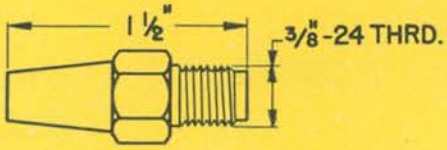
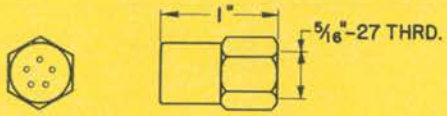
MULTIFLAME HEATING

USE WITH TORCH BUTTS: 300, 310, 315, P310, HD300, HD310

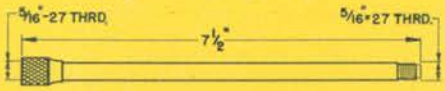
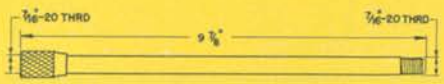
TYPE NUMBER	AVAILABLE SIZES		DESCRIPTION
11	5 TO 8 10, 12, 15		**OXYGEN-ACETYLENE** Multiflame nozzle for preheating, flame priming, straightening, etc. Heat resistant copper tip with copper elbow.
11-SS	10, 12, 15		Same nozzle as Type 11 except with stainless steel elbows for strength and to minimize heat conduction.
12	5 TO 8 10, 12, 15, 20		**OXYGEN-PET. GAS or NATURAL GAS** Multiflame nozzle for preheating, flame priming, straightening, descaling, paint burning, etc. Heavy copper tip with recessed face.
12-SS	10, 12, 15, 20		Same nozzle as Type 12 except with stainless steel elbows for strength and to minimize heat conduction.
24	10, 12, 15		**OXYGEN-ACETYLENE** Same nozzle as Type 11-SS except with airadiator unit for extremely hot work.
25	10, 12, 15, 20		**OXYGEN-PROPANE or NATURAL GAS** Same nozzle as Type 12-SS except with airadiator unit for extremely hot work.
31	30		**OXYGEN-PROPANE or NATURAL GAS** Large (2" dia.) tip with soft flames for preheating, descaling, priming, etc. Handle shown is of fibre for greater ease of holding and manipulating the torch.
57	NOZZLE WITHOUT TIP		**OXYGEN-ACETYLENE** For use with multiflame tips 1-A-30 to 5-A-30 (see page 14); also all oxygen-acetylene tips, listed on page 23. For light preheating, brazing, silver brazing, etc.
361	WITH 4-INCH FLAME STRIP		**OXYGEN-ACETYLENE—DESCALING ATTACH.** For flame priming, descaling, flame shaping and warping, paint burning, etc. Provided with meehanite shoe to protect the multiflame head from wear.
362	WITH 6-INCH FLAME STRIP		

TIPS, ELBOW TIPS

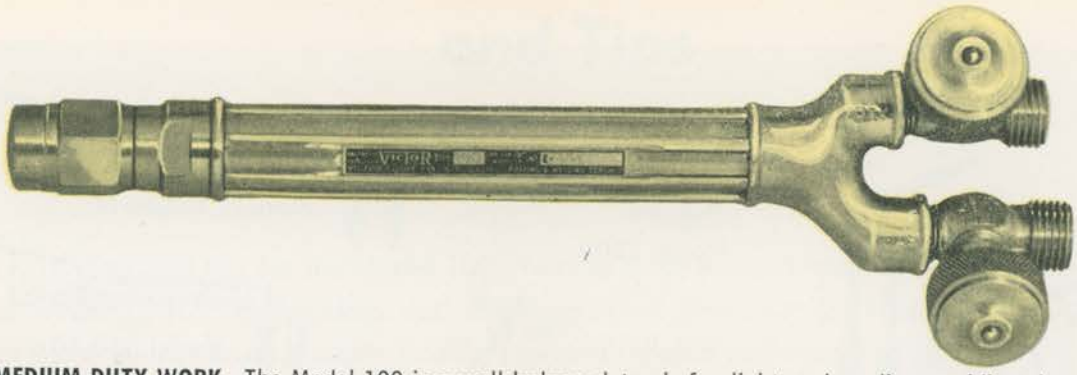
FOR USE WITH NOZZLES THAT FIT TORCH BUTTS: 300, 310, 315, P310, HD300, HD310

TYPE NUMBER	AVAILABLE SIZES		DESCRIPTION
AB-4	000 TO 8		**OXYGEN-ACETYLENE** Elbow tips 000-AB-4 to 4-AB-4 for use with mixer 4-CD-4 and tips 5-AB-4 to 8-AB-4 for use with mixer 8-CD-4 (see page 11). For welding, brazing, silver brazing, etc. Flame Characteristic—long cone.
A-1	000 TO 12		**OXYGEN-ACETYLENE** Renewable tip ends for Type 1, 2, 34 nozzles. (See pages 11-12.) Flame Characteristic—long cone.
A-1A	1 TO 12		**OXYGEN-ACETYLENE** Renewable tip ends for Type 1, 2, 34 nozzles. (See pages 11-12.) Flame Characteristic—bulbous cone.
A-7	000 TO 5		**OXYGEN-ACETYLENE** Use with nozzle types 7, 8, 38, 45. (See pages 12.) For light welding, brazing, silver brazing. Flame Characteristic—long cone.
A-7A	1 TO 5		Same as above except bulbous cone.
A-30	1 TO 5		**OXYGEN-ACETYLENE** Use with nozzles 57. (See page 13.) Multiflame tip for light preheating, silver brazing, etc.

NOZZLE EXTENSIONS

TYPE NUMBER	AVAILABLE SIZES		DESCRIPTION
S-1	S-1		Use with elbows 000-AB-4 to 4-AB-4 and mixer 4-CD-4. (See above and page 11.)
S-2	S-2		Use with elbows 5-AB-4 to 8-AB-4 and mixer 8-CD-4. (See above and page 11.)

Model 100 Welding Torch



FOR LIGHT AND MEDIUM DUTY WORK. The Model 100 is a well balanced torch for light and medium welding, brazing and heating operations. A complete selection of welding nozzles and tips are available for a wide range of operations. (Refer to pages 16-19.)

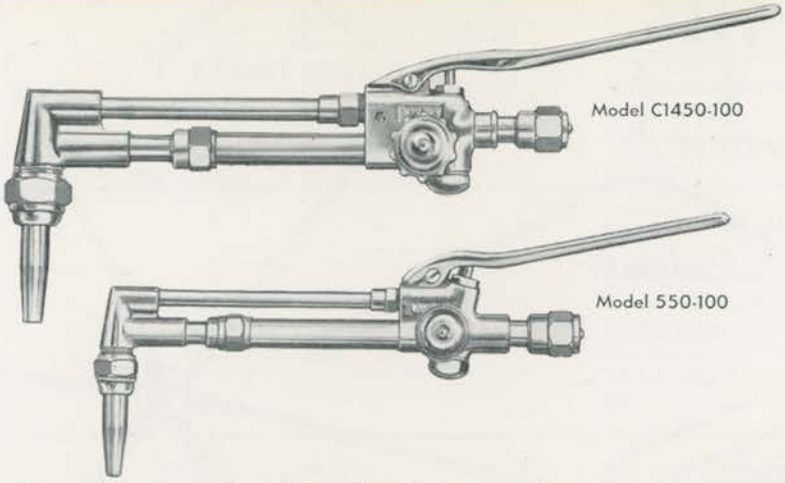
STURDY THREADED ASSEMBLY, precision machined forged valves and body "Y", seamless inner tube and handle, and a rugged bronze head assure maximum work life with ease of maintenance and service of damaged or worn parts.

SPECIFICATIONS

	Length	Weight	Hose Connections
Model 100	8½"	1 lb.	"B" (9/16"-18 threads) Oxygen R.H., Fuel Gas L.H. threads

CUTTING ATTACHMENTS FOR USE WITH THE MODEL 100 WELDING TORCH

Models 550-100 and C1450-100



A USEFUL RANGE of light and medium cutting operations is handled by the addition of these efficient, well designed cutting attachment Models 550-100 or C1450-100.

THE MODEL 550-100 Cutting Attachment is excellent for light cutting operations and occasional short jobs up to approximately 2" sections, using Type 5 Series cutting tips up to size 2.

THE MODEL C1450-100 Cutting Attachment handles light and medium operations as well as short jobs up to approximately 6" in thickness using Type 3 Series cutting tips up to size 4.

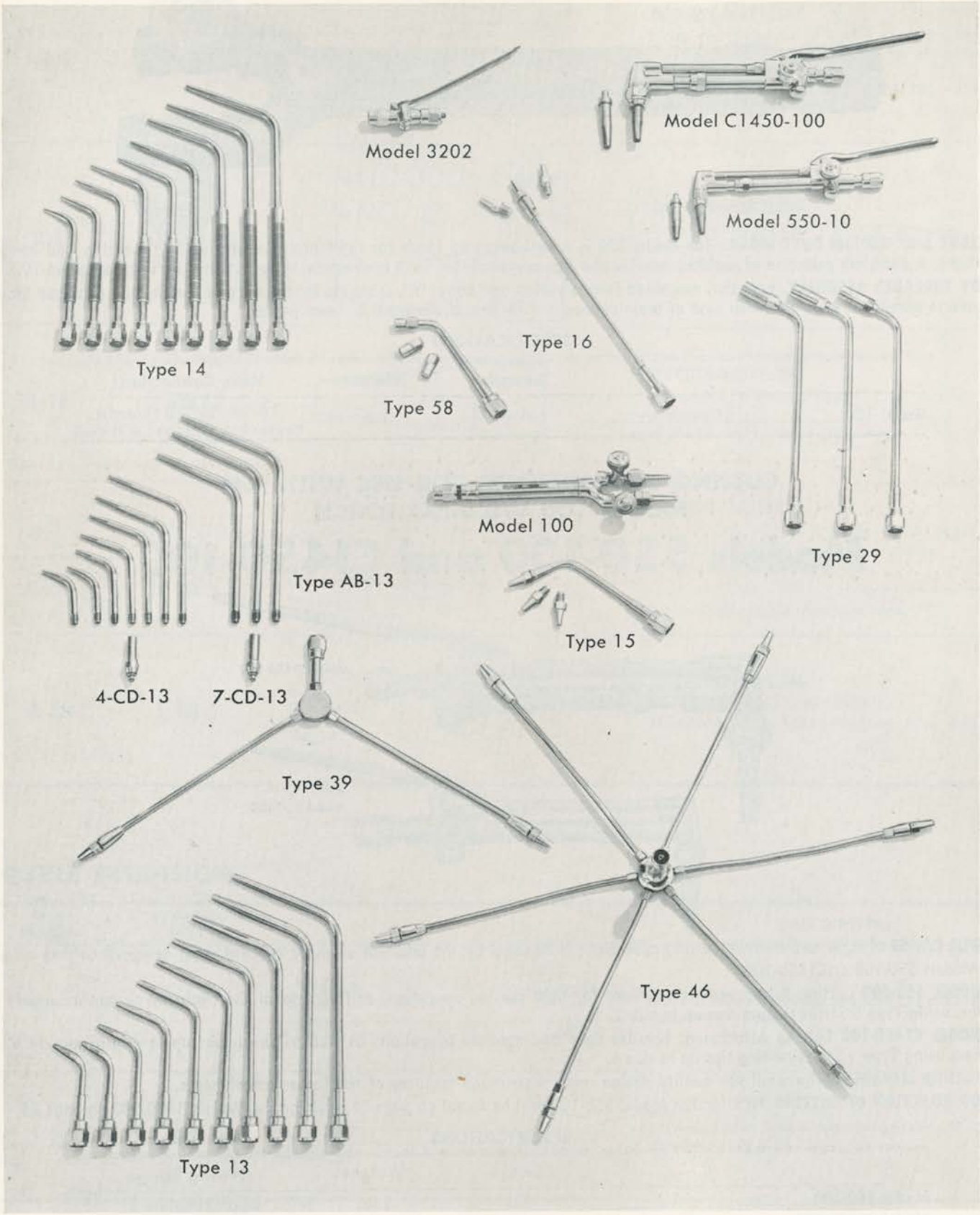
Both cutting attachments have all the quality design and construction features of the larger attachments.

A GOOD SELECTION OF CUTTING TIPS for the Model 550-100 will be found on page 36, and for the Model C1450-100 on page 35.

SPECIFICATIONS

	Length	Weight	Cutting Range
Model 550-100	8¼"	1 lb.	Approximately 2"
Model C1450-100	9½"	1 lb. 11 oz.	Approximately 6"

Model 100 Welding Torch, Nozzles and Cutting Attachments



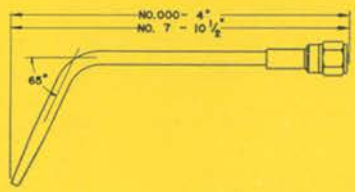
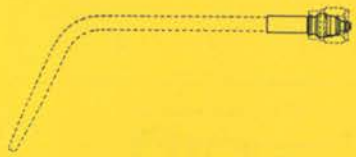
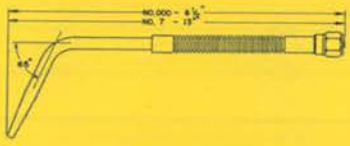
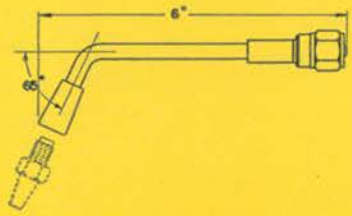
VICTOR Welding Torch Nozzles and Tips

for use with Model 100 Welding Torch Butt

The many nozzles and tips for the Model 100 Welding Torch Butt provide a wide choice of types and sizes for welding, heating, brazing, and soldering. Their sound design, rugged construction, and excellent flame characteristics assure trouble free and reliable performance. Type 13 Nozzle has a one piece precision swaged copper elbow tip. Type 14 Nozzle is identical to Type 13 except it has a chrome plated elbow tip to minimize slag adhesion and the Victor "Airadiator" unit which dissipates heat away from the mixer. Also interchangeable tip type nozzles, such as Types 15, 16, 39, 46, 50, and 58, for single or multiflame operations present a flexible selection for general or specialized applications.

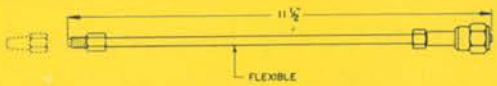
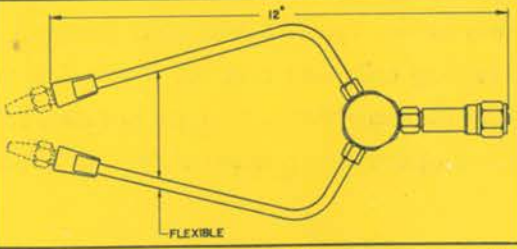
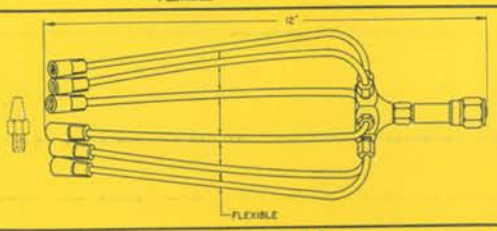
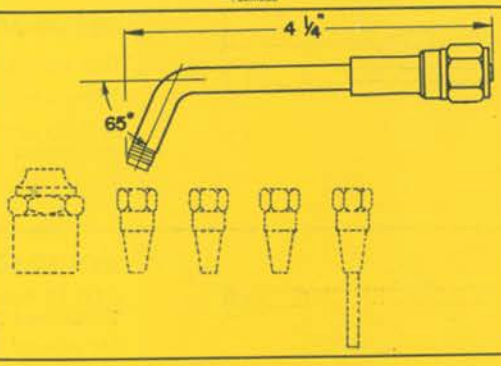
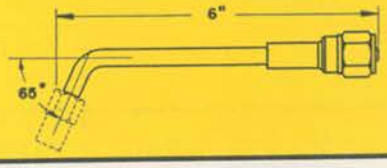
GENERAL PURPOSE

USE WITH TORCH BUTT: 100

TYPE NUMBER	AVAILABLE SIZES		DESCRIPTION
13	000 TO 7		**OXYGEN-ACETYLENE** One piece swaged copper elbow tips. General welding and brazing. Each tip provided with individual mixer for best flame performance. Flame Characteristic—long cone.
4-CD-13	MIXER ONLY		**OXYGEN-ACETYLENE** 4-CD-13 mixer for use with elbow tips 000-AB-4 to 2-AB-4 and 3-AB-13 and 4-AB-13 (see page 19). For general welding and brazing. Flame Characteristic—long cone.
7-CD-13			7-CD-13 mixer for use with 5-AB-13 to 7-AB-13 elbow tips.
14	000 TO 7		**OXYGEN-ACETYLENE** Same as Type 13 except chrome plated elbow tips and with "Airadiator" unit to radiate the heat away from the mixer.
15	NOZZLE WITHOUT TIP		**OXYGEN-ACETYLENE** Uses tips 000-A-7 to 5-A-7 (long cone) or tips 1-A-7A to 5-A-7A (bulbous cone). (See page 19.) For general welding and brazing.

GENERAL PURPOSE, cont.

USE WITH TORCH BUTT: 100

TYPE NUMBER	AVAILABLE SIZES		DESCRIPTION
16	NOZZLE WITHOUT TIP		**OXYGEN-ACETYLENE** Uses tips 000-A-7 to 5-A-7 (long cone) or tips 1-A-7A to 5-A-7A (bulbous cone). (See page 19.) Flexible elbow—may be bent to desired shape. For brazing, silver brazing, etc.
33	NOZZLE WITHOUT TIP		**OXYGEN-ACETYLENE** Flexible nozzle. May be bent to desired shape for "hard to get at" places. Uses tips A-19, A-30, A-36, A-48, A-49 and A-55 (see page 23). For silver brazing, brazing, etc.
39	NOZZLE WITHOUT TIP		**OXYGEN-ACETYLENE** Two tip nozzle uses tips 000-A-7 to 5-A-7 (long cone) or tips 1-A-7A to 5-A-7A (bulbous cone). (See page 19.) Each elbow may be bent to desired shape for silver brazing, brazing, etc.
46	NOZZLE WITHOUT TIP		**OXYGEN-ACETYLENE** Six tip nozzle uses tips 000-A-7 to 1-A-7 (long cone) or tip 1-A-7A (bulbous cone). (See page 19.) Each elbow may be bent to desired shape for silver brazing, brazing, etc.
50	NOZZLE WITHOUT TIP		**OXYGEN-ACETYLENE** Uses tips type A-52, A-54. **OXYGEN-PET. or NATURAL GAS (City)** Uses tips type A-51. **COMPRESSED AIR-ACETYLENE** Uses tips type A-53. **COMPRESSED AIR-PET. GAS, NATURAL or CITY GAS** Uses tips type A-50. This nozzle furnished on the 3401 Torch. (Page 37.) For all tips (see page 19).
58	NOZZLE WITHOUT TIP		**OXYGEN-ACETYLENE** Uses multiflame tips 1-A-30 to 5-A-30 (see page 19), and all tips listed on page 23. For silver brazing, light preheating.

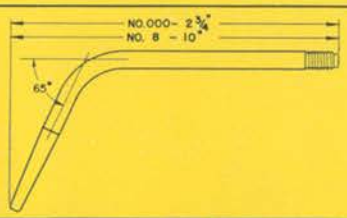
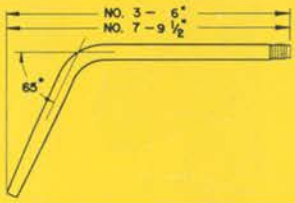
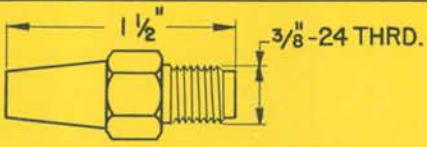
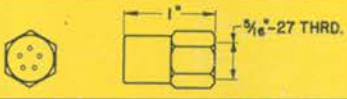
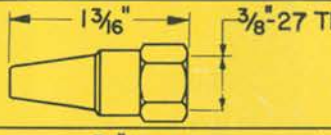
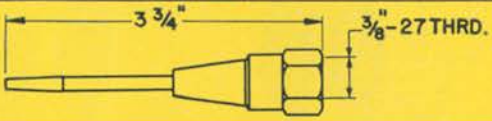
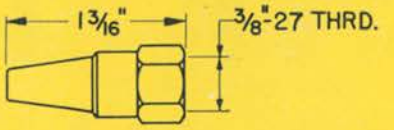
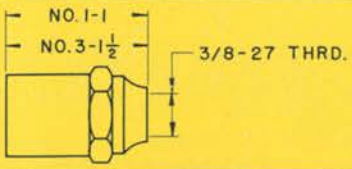
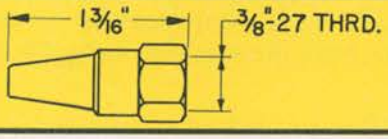
HEATING

USE WITH TORCH BUTT: 100

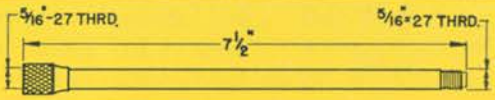
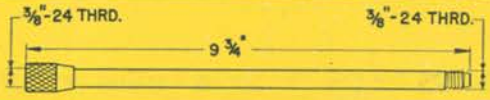
TYPE NUMBER	AVAILABLE SIZES		DESCRIPTION
29	1 TO 8, 10		**OXYGEN-ACETYLENE** Multiflame nozzle for preheating and brazing. Especially good for silver brazing jobs where soft flames and intense heat are required.

TIPS, ELBOW TIPS

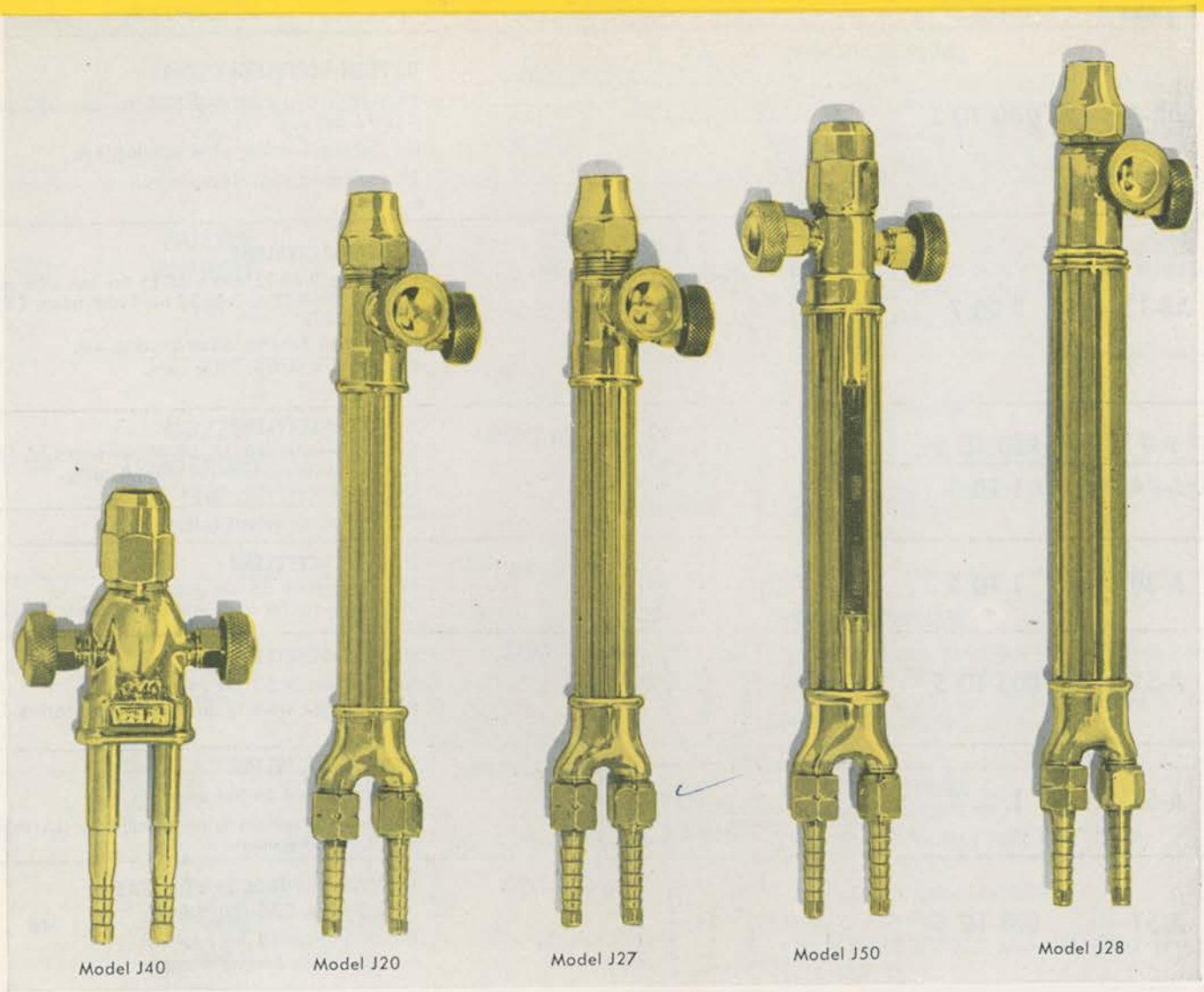
FOR USE WITH NOZZLES THAT FIT 100 TORCH BUTTS

TYPE NUMBER	AVAILABLE SIZES		DESCRIPTION
AB-4	000 TO 2		**OXYGEN-ACETYLENE** Elbow tips 000-AB-4 to 2-AB-4 for use with mixer 4-CD-13 (see page 17). For welding, brazing, silver brazing, etc. Flame Characteristic—long cone.
AB-13	3 TO 7		**OXYGEN-ACETYLENE** Elbow tips 3-AB-13 and 4-AB-13 for use with mixer 4-CD-13. 5-AB-13 to 7-AB-13 used with mixer 7-CD-13 (see page 17). For welding, brazing, silver brazing, etc. Flame Characteristic—long cone.
A-7	000 TO 5		**OXYGEN-ACETYLENE** Use with nozzles: 15, 16, 39, 46 (see pages 17, 18). For light welding, brazing, silver brazing. Flame Characteristic—long cone.
A-7A	1 TO 5		Same as above except bulbous cone.
A-30	1 TO 5		**OXYGEN-ACETYLENE** Use with nozzle: 58 (see page 18). Multiflame tip for light preheating, silver brazing.
A-52	000 TO 5		**OXYGEN-ACETYLENE** Use with nozzle 50 (see page 18). For very light welding, brazing, silver brazing.
A-54	1, 3, 5		**OXYGEN-ACETYLENE** Use with nozzle 50 (see page 18). For repairing radiators; light welding and brazing in very confined spaces.
A-51	000 TO 5		**OXYGEN-NATURAL or CITY GAS or PETROLEUM GAS (PROPANE)** Use with nozzle 50 (see page 18). For light silver brazing, brazing.
A-50	1, 2, 3		**COMPRESSED AIR-NATURAL or CITY GAS or PETROLEUM GAS (PROPANE)** Use with nozzle 50 (see page 18). For light heating. Excellent for silver brazing or soft soldering.
A-53	1, 2, 3		**COMPRESSED AIR-ACETYLENE** Use with nozzle 50 (see page 18). For silver brazing, soft soldering.

NOZZLE EXTENSIONS

TYPE NUMBER	AVAILABLE SIZES		DESCRIPTION
S-1	S-1		Use with elbows: 000-AB-4 to 2-AB-4, 3-AB-13, 4-AB-13 and mixer 4-CD-13 (see above).
S-2-100	S-2-100		Use with elbows: 5-AB-13 to 7-AB-13 and mixer 7-CD-13 (see above.)

MODEL "J" SERIES WELDING TORCH BUTTS



WIDE SELECTION OF MODELS FOR LIGHT WORK. The "J" Series Torches (J-20, J-27, J-28, J-40, and J-50) provide a complete range of compact, well balanced, and light weight torches for welding, silver brazing, lead burning, and brazing operations on medium, light or very light gauge metals.

ACCURATE AND CONVENIENT CONTROL VALVES. Ease and accuracy of flame adjustments are furnished by the conveniently located control valves. The J-20, J-40, and J-50 models have tapered needle valves which are especially suitable for very fine adjustments. The J-27 and J-28 models have the precision Victor "Ball Point" valve which affords both accuracy and capacity for varying job requirements.

CHOICE OF LENGTH, WEIGHT, AND VALVE LOCATION to suit individual operator or job requirements are listed in the table below:

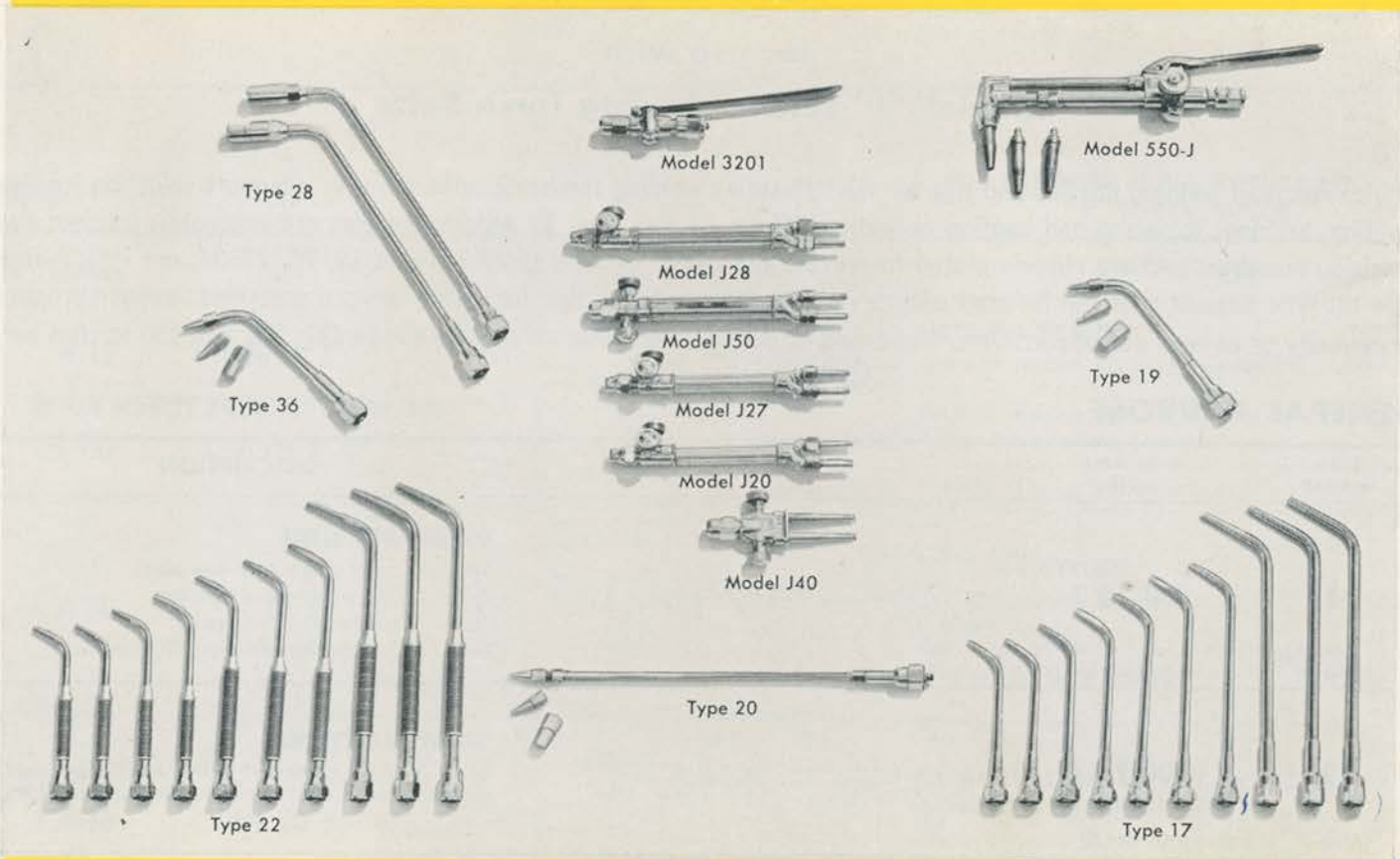
Model	Length	Weight	Hose Connection*	Description
J-20	5½"	6½ oz.	"A" (⅜"-24)	Needle valves in head—75° apart
J-27	5½"	6½ oz.	"A" (⅜"-24)	Ball Point valves in head—75° apart
J-28	7"	9½ oz.	"A" (⅜"-24)	Same as J-27 except larger, longer handle
J-40	3¾"	5½ oz.	3/16" Hose - Slip-on	Needle valves in head 180° apart—no handle
J-50	6¼"	8½ oz.	"A" (⅜"-24)	Needle valves in head 180° apart

*Oxygen R.H., Fuel Gas L.H. thread.

A LARGE, USEFUL SELECTION OF NOZZLES AND TIPS for the "J" Series Torches is illustrated on pages 22 and 23.

VICTOR Welding Torch Nozzles and Tips

for use with
Model "J" Series Welding Torch Butts



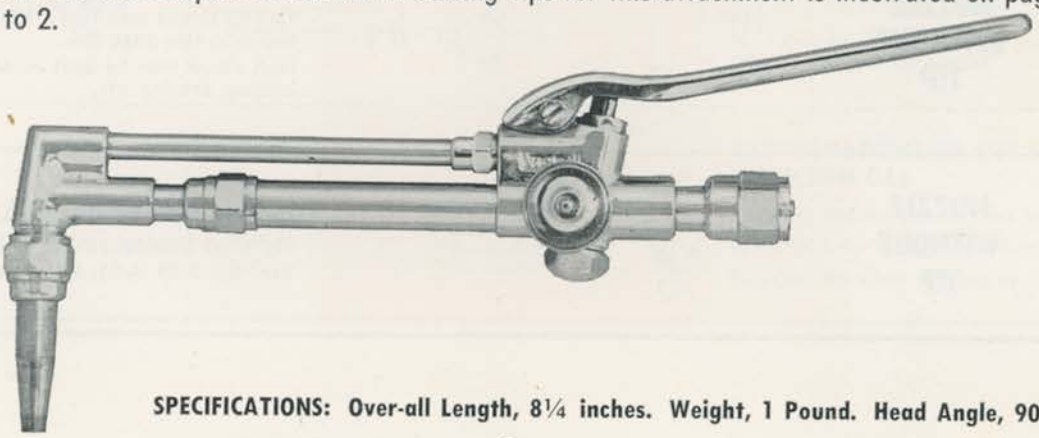
CUTTING ATTACHMENT MODEL 550-J
for use with
Model "J" Series Welding Torch Butts

ADEQUATE CAPACITY. The Model 550-J is a well balanced, light weight cutting attachment for use on light cutting applications as well as occasional short jobs up to approximately 2" steel.

QUALITY DESIGN AND CONSTRUCTION. Although smaller and lighter than the larger models, the 550-J cutting attachment has the same quality design and construction features to insure efficient and reliable performance at all times.

USED ON ALL "J" TORCHES. The Model 550-J can be used on all of the "J" series welding torch butts with the maximum all-around capacity being obtained from the J-27, J-28, and J-50 models.

CUTTING TIP SELECTION. An adequate selection of cutting tips for this attachment is illustrated on page 36 in a range of sizes from 000 to 2.



SPECIFICATIONS: Over-all Length, 8¼ inches. Weight, 1 Pound. Head Angle, 90° only.

VICTOR Welding Torch Nozzles and Tips

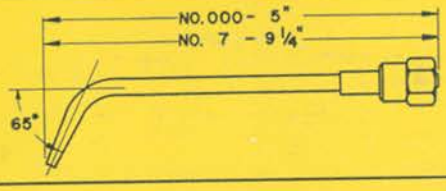
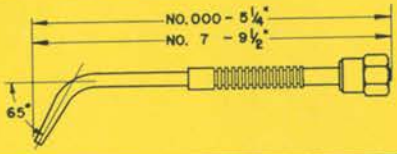
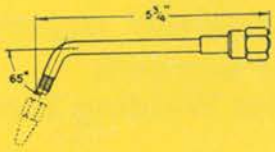
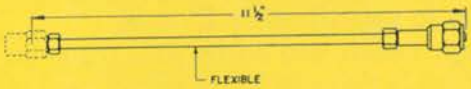
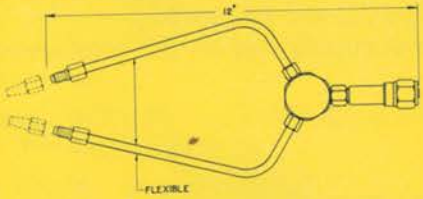
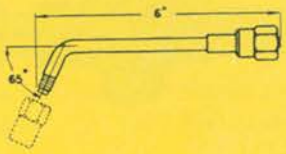
for use with

Model "J" Series Welding Torch Butts

A wide range of welding nozzles and tips for the "J" series welding torches insures the user adequate selection for light welding, brazing, soldering and heating operations. Type 17 and Type 22 welding nozzles are accurately swaged over precision mandrels and are chrome plated to prevent adherence of weld spatter. Types 19, 20, 28, 36, are interchangeable tip type nozzles that can be used with a very flexible group of tips for either oxygen-acetylene, oxygen-propane, oxygen-city or natural gas applications. Size 5 and larger tips are recommended for use on J27, J28, and J50 torches only.

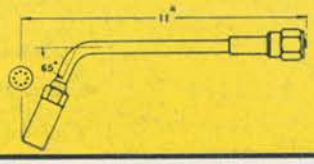
GENERAL PURPOSE

USE WITH "J" TYPE TORCH BUTTS

TYPE NUMBER	AVAILABLE SIZES		DESCRIPTION
17 (Also in ½ sizes up to size 5)	000 TO 7		**OXYGEN-ACETYLENE** Swaged copper elbow tips—one piece. General light welding and brazing. Flame Characteristic—long cone. Each nozzle provided with individual mixer.
22 (Also in ½ sizes up to size 5)	000 TO 7		**OXYGEN-ACETYLENE** Same as Type 17 except with "Airadiator" unit to dissipate heat from the mixer on hot confined jobs.
19	NOZZLE WITHOUT TIP		**OXYGEN-ACETYLENE OR PROPANE** Uses tips A-19, A-30, A-36, A-48, A-49, A-55 (see page 23). For light welding, brazing and heating.
20	NOZZLE WITHOUT TIP		**OXYGEN-ACETYLENE** Flexible nozzle. May be bent to desired shape for "hard to get at" places. Uses tips A-19, A-30, A-36, A-48, A-49, and A-55 (see page 23).
42	NOZZLE WITHOUT TIP		**OXYGEN-ACETYLENE** Two-tip Nozzle uses Tips A-19, A-30, A-36, A-48, A-49 and A-55 (see page 23). Each elbow may be bent to desired shape for silver brazing, brazing, etc.
36	NOZZLE WITHOUT TIP		**OXYGEN-CITY OR NATURAL GAS (Low Pressure)** For silver brazing, soldering, heating. Uses tips A-36, A-55, A-49 (see page 23).

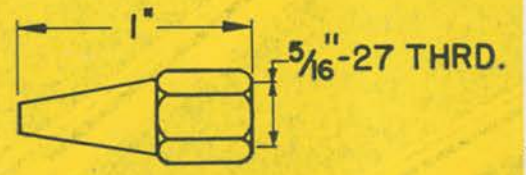
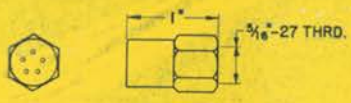
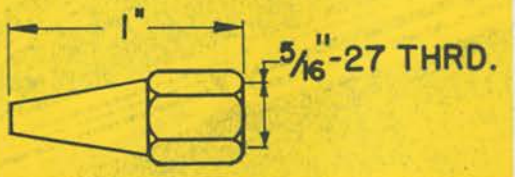
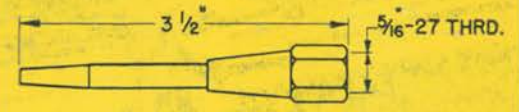
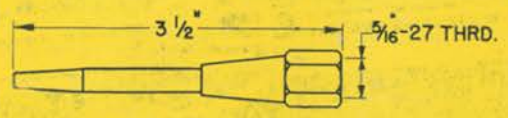
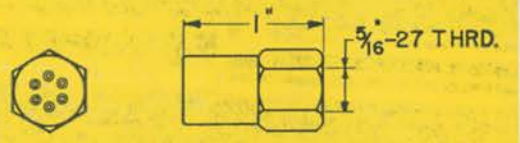
HEATING

USE WITH "J" TYPE TORCH BUTTS

TYPE NUMBER	AVAILABLE SIZES		DESCRIPTION
28	1 TO 8		**OXYGEN-ACETYLENE** Multiflame nozzle used for light preheating and silver brazing operations.

TIPS

FOR USE WITH NOZZLES THAT FIT THE "J" TORCH BUTTS

TYPE NUMBER	AVAILABLE SIZES		DESCRIPTION
A-19	000 TO 5		**OXYGEN-ACETYLENE** Use with nozzles 19, 20. (See page 22), and 57 (see page 13). For light welding, brazing, silver brazing. Flame Characteristic—long cone.
A-19A	1 TO 5		Same as above except bulbous cone.
A-30	1 TO 5		**OXYGEN-ACETYLENE** Use with nozzles 19, 20. (See page 22), and 57 (see page 13). Multiflame nozzle for light preheating. Excellent for silver brazing.
A-36	000 TO 5		**OXYGEN-NATURAL OR CITY GAS OR PETROLEUM GAS (PROPANE)** Use with nozzle 36. (See page 22.) For light silver brazing, brazing.
A-48	1, 3, 5		**OXYGEN-ACETYLENE** Use with nozzles 19, 20. (See page 22), and 57 (see page 13). For repairing radiators and light welding and brazing in very confined spaces.
A-49	1, 3, 5		**OXYGEN-NATURAL OR CITY GAS OR PETROLEUM GAS (PROPANE)** Use with nozzles 36, 19. (See page 22.) For repairing radiators or for soldering or silver brazing in very confined spaces.
A-55	1 TO 5		**OXYGEN-NATURAL OR CITY GAS OR PETROLEUM GAS** Use with nozzles 36, 19. (See page 22.) Multiflame tip for light heating. Excellent for silver brazing or soft soldering.

VICTOR

VICTOR HAND CUTTING TORCHES

LARGE SELECTION. Victor offers an unusually large selection of hand cutting torch models to suit every job and operator preference. There are two types of torches. The "Standard" type (Model Series 400, 1400, 2000, and the "C" type (Model Series C-400, C-1400, C-2000). The "C" type torches are identical in design and construction to the "Standard" except that they utilize a smaller cutting tip.

POSITION OF CUTTING OXYGEN LEVER. Both "Standard" and "C" Models are available with the cutting oxygen control lever on the top or bottom and pivoted either at the front or rear of the torch handle.

CHOICE OF HEAD ANGLES. Both the "Standard" and "C" Models can be furnished with 90°, 75°, 45°, or 180° angle heads. 90° heads are furnished unless specified otherwise. Head and tube assemblies of the various angle heads are interchangeable on any particular model in a series.

CHOICE OF LENGTH. "Standard" Models are available in over-all lengths of 21 inches and 27 inches. In the "X" and "HD" Models, "X" signifies extra length—"HD" denotes extra length and capacity. All "C" models are 19" long.

CUTTING CAPACITY. "Standard" torches are recommended for a cutting range up to approximately 12 inches, using cutting tips from 000 to 7. "Heavy Duty" torches are used for cutting up to approximately 20 inches steel or for heavy deseaming, gouging, weld removal and similar operations which require intense preheat and high volume cutting oxygen. For continuous heavy cutting applications requiring size 10, 12, 14 and 16 tips, refer to the Model 4040 and 4041 three hose cutting torches listed on page 30. "C" cutting torches use tips from size 000 to 6 with a cutting capacity of approximately 10 inch steel sections.

QUALITY CONSTRUCTION FEATURES. The illustrations show the well balanced, clean cut design and sturdy construction of Victor Hand Cutting Torches. Precision machined mating parts insure gas tight joints as well as ease of service and repair. Die forged heads and bodies, extruded seamless tubing, rugged control valves and cutting oxygen valves with "O" ring gland for long, leak-tight service are some of the features that make Victor Torches unsurpassed for durable service and enduring ownership satisfaction.

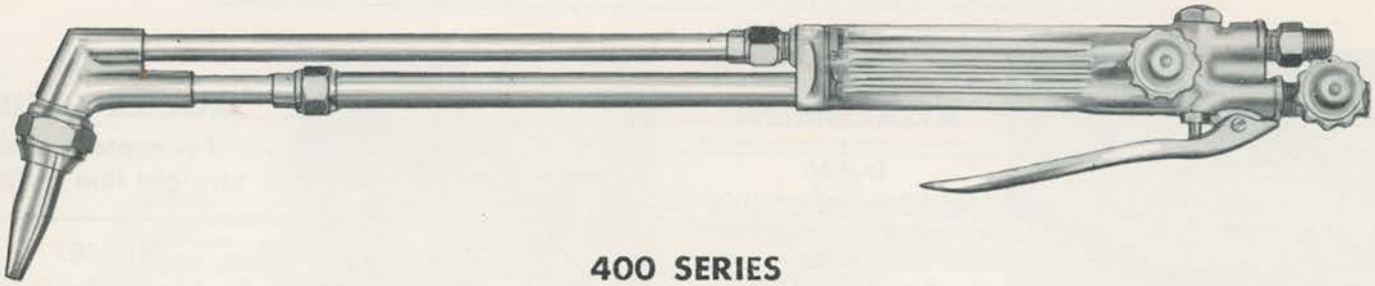
LOW PRESSURE FUEL GAS. All hand cutting torches are available at no extra cost with a special injector type mixer for use with low pressure fuel gases. When ordering specify torch series, type of fuel gas and available pressure.

SPECIAL TORCHES. Special length or purpose torches can be engineered on request.

HOSE CONNECTIONS. All hand cutting torches have "B" (9/16" - 18 thread) inlet connections — Oxygen R.H., Fuel Gas L.H. threads.

STANDARD TYPE HAND CUTTING TORCHES

(For Cutting Tips, see listing starting on page 32.)

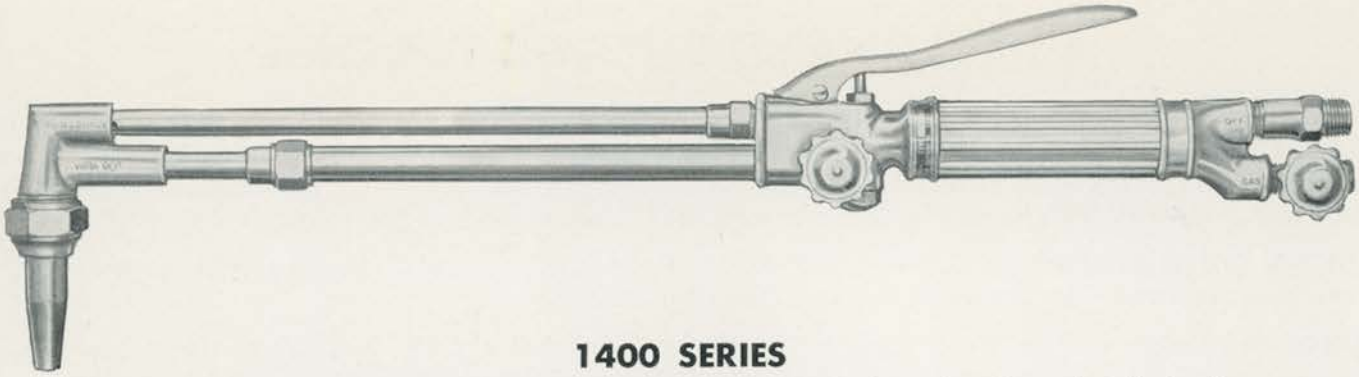


400 SERIES

The 400 series hand cutting torches are the bottom lever type with the lever pivot at the rear of the handle.

SPECIFICATIONS

MODEL	LENGTH	WEIGHT	HEAD ANGLE (Specify)	INTERCHANGEABLE HEAD AND TUBE ASSEMBLIES			
				90°	75°	45°	180°
400	21"	3 lb. 6 oz.	90°, 75°, 45°, 180°	400-07	400-05	400-03	400-09
400-X	27"	3 lb. 14 oz.	90°, 75°, 45°, 180°	400-12	400-11	400-10	400-13
400-HD	27"	3 lb. 14 oz.	90°, 75°, 45°, 180°	400-12	400-11	400-10	400-13

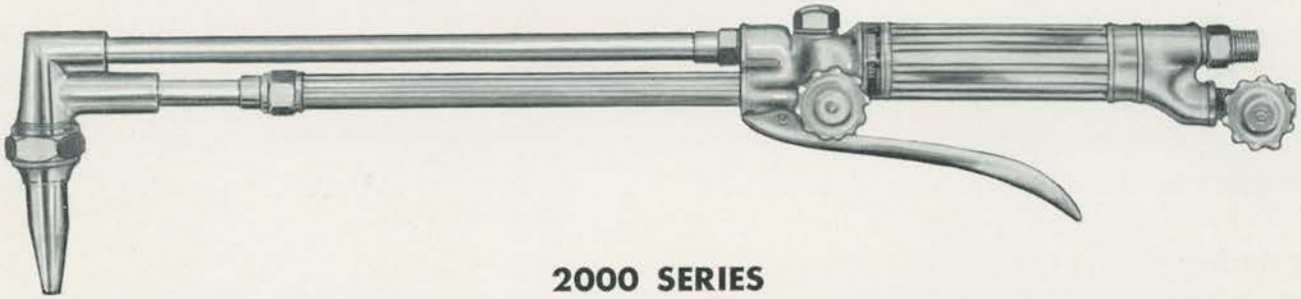


1400 SERIES

The 1400 series hand cutting torches are the top lever type with the lever pivot forward of the handle

SPECIFICATIONS

MODEL	LENGTH	WEIGHT	HEAD ANGLE (Specify)	INTERCHANGEABLE HEAD AND TUBE ASSEMBLIES			
				90°	75°	45°	180°
1400	21″	3 lb. 6 oz.	90°, 75°, 45°, 180°	1400-03	1400-02	1400-01	1400-04
1400-X	27″	3 lb. 14 oz.	90°, 75°, 45°, 180°	1400-22	1400-21	1400-20	1400-23
1400-HD	27″	3 lb. 14 oz.	90°, 75°, 45°, 180°	1400-22	1400-21	1400-20	1400-23

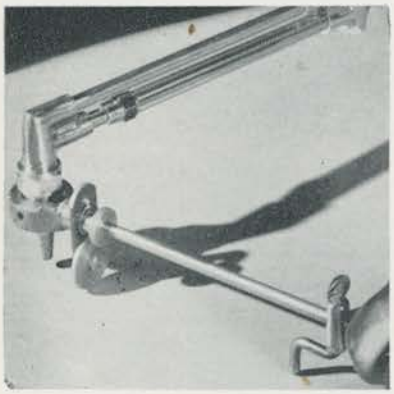


2000 SERIES

The 2000 series hand cutting torches are the bottom lever type with the lever pivot forward of the handle.

SPECIFICATIONS

MODEL	LENGTH	WEIGHT	HEAD ANGLE (Specify)	INTERCHANGEABLE HEAD AND TUBE ASSEMBLIES			
				90°	75°	45°	180°
2000	21″	3 lb. 4 oz.	90°, 75°, 45°, 180°	1400-03	1400-02	1400-01	1400-04
2000-X	27″	3 lb. 12 oz.	90°, 75°, 45°, 180°	1400-22	1400-21	1400-20	1400-23
2000-HD	27″	3 lb. 12 oz.	90°, 75°, 45°, 180°	1400-22	1400-21	1400-20	1400-23



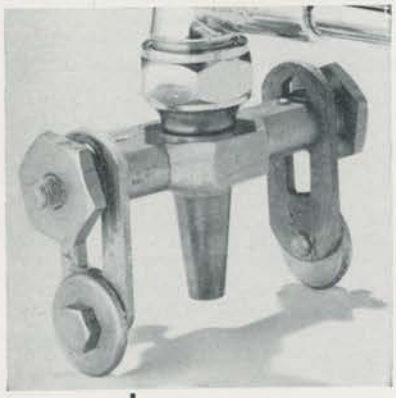
CIRCLE CUTTING ATTACHMENT

D-496
for "Standard" tips

C-496
for Type 3 series tips

5-496
for Type 5 series cutting attachment tips

This circle cutting attachment fits over the cutting tip shank. The head of the attachment is fitted with a bearing to assure free and unrestricted motion of the torch, and is designed for full protection against slag or dirt restricting its movement. The roller guide is close to the attachment head to keep the end of the tip the proper distance from the work, and is adjustable for various heights.
The standard attachment will cut circles from 28 to 1¼ inches diameter. It can be furnished to cut larger circles upon request.



ROLLER GUIDE

For contour and straight line cutting

No. 497
for "Standard," Type 3 and Type 5 series cutting tips

This roller guide is adaptable to all styles of Victor cutting tips. It fits over the cutting tip shank and is secured with a thumb screw. The cutting tip can be adjusted for suitable distance from the work by adjusting the wheel heights of the attachment.

"C" TYPE HAND CUTTING TORCHES

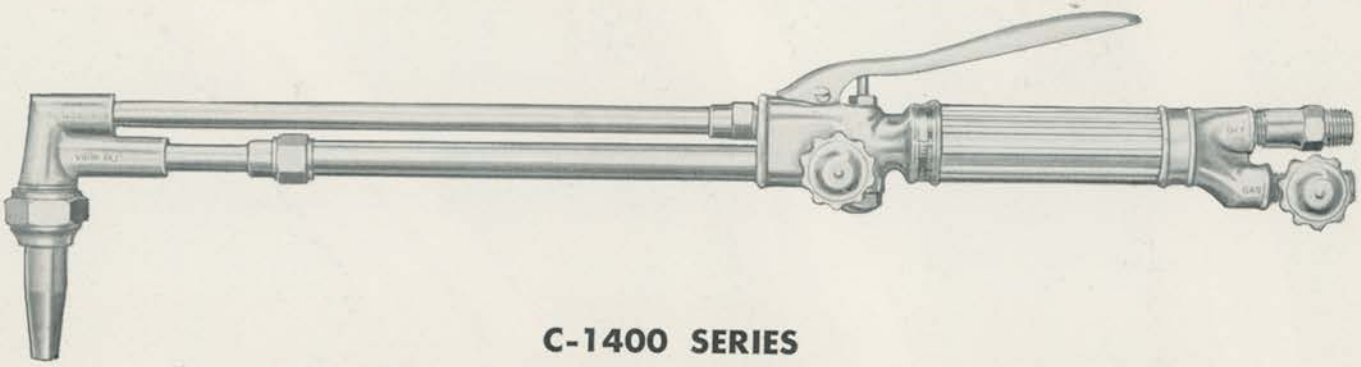
The "C" series hand cutting torches Models C-400, C-1400, C-2000 are similar to the "Standard" model torches and can be used for cuts up to approximately 10 inches. They have the same construction features as the "Standard" Models with the exception of over-all length, and a head which utilizes the Type 3 Series cutting tips in sizes 000-6 listed on page 35.

C-400 SERIES

The C-400 hand cutting torch is the bottom lever type with the lever pivot at the rear of the handle.

SPECIFICATIONS

MODEL	LENGTH	WEIGHT	HEAD ANGLE (Specify)	INTERCHANGEABLE HEAD AND TUBE ASSEMBLIES			
				90°	75°	45°	180°
C-400	19"	3 lb. 4 oz.	90°, 75°, 45°, 180°	C-400-08	C-400-07	C-400-06	C-400-09

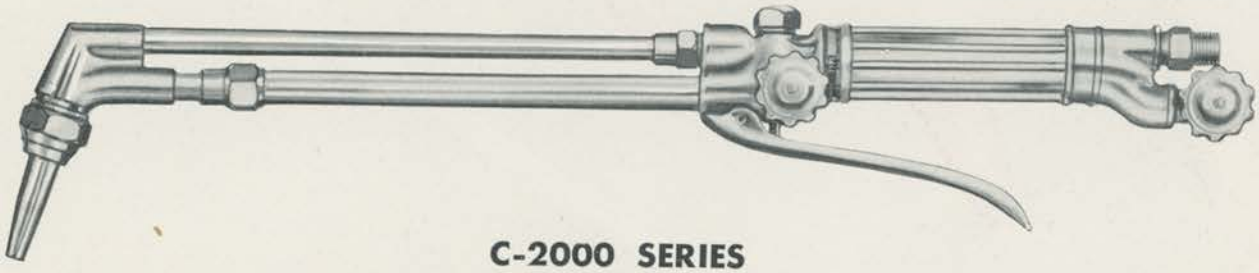


C-1400 SERIES

The C-1400 hand cutting torch is the top lever type with the lever pivot forward of the handle.

SPECIFICATIONS

MODEL	LENGTH	WEIGHT	HEAD ANGLE (Specify)	INTERCHANGEABLE HEAD AND TUBE ASSEMBLIES			
				90°	75°	45°	180°
C-1400	19"	3 lb. 4 oz.	90°, 75°, 45°, 180°	C-1400-04	C-1400-03	C-1400-02	C-1400-05



C-2000 SERIES

The C-2000 hand cutting torch is the bottom lever type with the lever pivot forward of the handle.

SPECIFICATIONS

MODEL	LENGTH	WEIGHT	HEAD ANGLE (Specify)	INTERCHANGEABLE HEAD AND TUBE ASSEMBLIES			
				90°	75°	45°	180°
C-2000	19"	3 lb. 2 oz.	90°, 75°, 45°, 180°	C-1400-04	C-1400-03	C-1400-02	C-1400-05

VICTOR MACHINE CUTTING TORCHES—*A torch for every job*

VICTOR MACHINE CUTTING TORCHES

APPLICATIONS. Victor Machine Cutting Torches are used for cutting light or heavy plates, bars, billets, ingot cropping, and general cutting. All commercial fuel gases commonly used for machine cutting can be utilized by selection of the proper size and type tip from the "Standard" tip charts listed on pages 32 to 34.

CHOICE OF 2 OR 3 HOSE TORCHES. Victor Machine Cutting Torches are made in both the two and three hose types. The two hose torch has one hose for the fuel gas supply and another hose for the oxygen supply which is used for both preheating and cutting. Two hose machine cutting torches give their most efficient performance on cuts up to approximately 12". The three hose torch has an independent cutting oxygen supply which provides a large volume cutting stream without disturbing the preheat flame characteristics—a feature especially important when cutting heavier sections with large size tips.

CHOICE OF LENGTHS. Victor Machine Cutting Torches are available in over-all lengths of 19¼", 15¼", 12¼", and 7⅛" to suit a variety of applications.

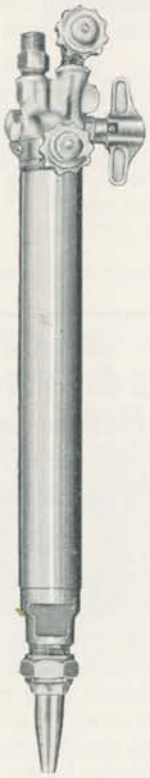
TORCH HOLDER DATA. All machine cutting torches have 1⅜ inch diameter barrels without racks or with racks for 24 or 32 pitch pinions. They fit most machine torch holders.

CUTTING CONTROL VALVES. Two types of cutting oxygen control valves are available on all models. The "lock lever" type locks in the open position when fully depressed. The "quick opening" control is cam operated with a 90° turn and locks in the fully open position. Both are illustrated below.

LOCK LEVER TYPE

QUICK OPENING TYPE

TWO HOSE MACHINE CUTTING TORCHES



Available in Four Lengths

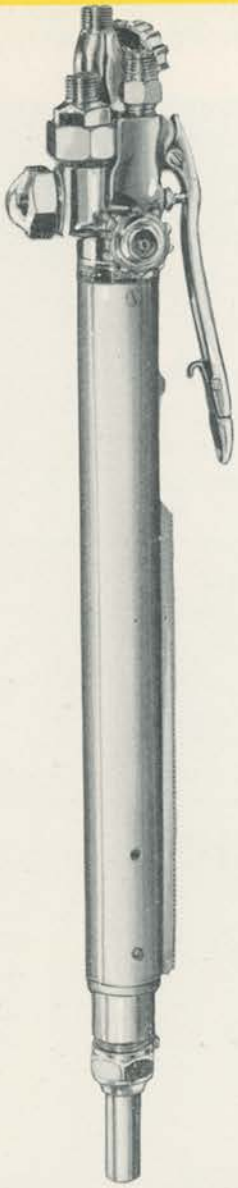
MODEL	LENGTH	H.P. OXYGEN VALVE TYPE	GEAR RACK	
			POSITION*	PITCH
420	15¼	LOCK	—	—
421	"	QUICK	—	—
422	"	LOCK	FRONT	24
423	"	LOCK	FRONT	32
424	"	QUICK	FRONT	24
425	"	QUICK	FRONT	32
426	"	QUICK	BACK	32
427	"	QUICK	BACK	24
430	19¼	LOCK	—	—
431	"	QUICK	—	—
433	"	LOCK	FRONT	24
434	"	LOCK	FRONT	32
435	"	QUICK	FRONT	24
436	"	QUICK	FRONT	32
437	"	QUICK	BACK	24
438	"	QUICK	BACK	32
440	12¼	LOCK	—	—
441	"	QUICK	—	—
442	"	LOCK	FRONT	24
443	"	LOCK	FRONT	32
444	"	QUICK	FRONT	24
445	"	QUICK	FRONT	32
460	7⅛	QUICK	—	—

*Front is the same side as the cutting oxygen valve.

HOSE CONNECTIONS: "B" (9/16"-18 thread). Oxygen R.H., Fuel Gas L.H. threads.

THREE HOSE MACHINE CUTTING TORCHES

Available in Three Lengths



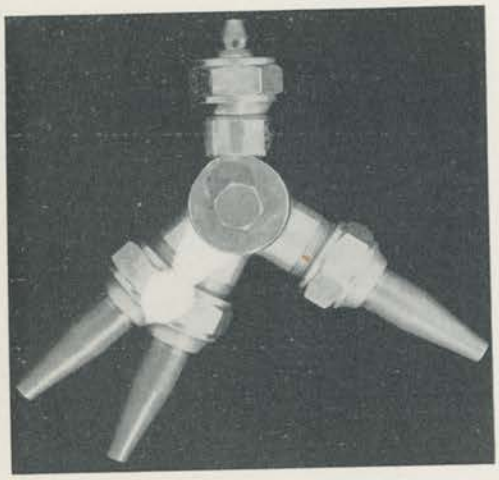
MODEL	LENGTH	H.P. OXYGEN VALVE TYPE	GEAR RACK	
			POSITION*	PITCH
4000	15¼	LOCK	—	—
4001	"	LOCK	FRONT	32
4002	"	LOCK	FRONT	24
4003	"	QUICK	—	—
4004	"	QUICK	FRONT	32
4005	"	QUICK	FRONT	24
4006	"	QUICK	BACK	32
4007	"	QUICK	BACK	24
4020	19¼	LOCK	—	—
4021	"	LOCK	FRONT	32
4022	"	LOCK	FRONT	24
4023	"	QUICK	—	—
4024	"	QUICK	FRONT	32
4025	"	QUICK	FRONT	24
4026	"	QUICK	BACK	32
4027	"	QUICK	BACK	24
**4040	32¼	LOCK	—	—
**4041	"	QUICK	—	—

*Front is the same side as the cutting oxygen valve.
**For heavy duty hand cutting operations.

INDEPENDENT PREHEAT AND CUTTING OXYGEN SUPPLY. Victor Model 4000 Series Cutting Torches provide the most important factors for successful heavy cutting: steady preheat flames during the entire operation and a high capacity, unrestricted, independent supply of cutting oxygen. A large cutting oxygen valve, streamlined internal passages, and provisions for large I.D. hose insure the maximum oxygen flow essential to efficient heavy cutting.

CUTTING OXYGEN CONNECTIONS. The cutting oxygen inlet connection on all models has the standard "B" (9/16"-18 R.H. thread) adapted with tailpieces for either ¼", 5/16", or ⅜" I.D. hose. Adaptor No. 0327-02 with "C" (⅞"-14 R.H. thread) and tailpieces for either ⅜" or ½" I.D. hose can be furnished on request. Specify the size of hose to be used. All fuel gas and preheat oxygen connections are "B" (9/16"-18 thread). Oxygen R.H. fuel gas L.H. threads.

CUTTING TIPS will be found on pages 32 to 34.



Model 491
ADJUSTABLE HEAD
for
Machine Cutting Torches

The 491 adjustable head is used with machine cutting torches for cutting bevels without changing the position of the torch from the vertical. It can be set at any angle from 0 to 90° on either side of the vertical by loosening the hexagon nut, making the adjustment, and retightening. It is attached to the torch in the same manner as the cutting tip.

Model 492
CIRCLE CUTTING ATTACHMENT
for Machine Cutting Torches

The machine torch head fits into the attachment body and is locked by a thumb screw. The roller guide on the outside steadies the torch and is adjustable for height. Standard attachments will cut circles from 1¼ to 28 inches diameter.

VICTOR CUTTING TIPS

COMPLETE SELECTION. Victor Cutting Tips are available in more than 35 types, with a selection of sizes 000 to 16 to cover a great variety of cutting operations.

SOUND DESIGN. Each cutting tip has carefully proportioned preheat and cutting oxygen orifices to provide the most efficient performance on each application.

HEAT RESISTING MATERIAL. The uniform quality copper alloy used in Victor Cutting Tips has excellent resistance to heat and wear, providing long trouble-free service.

PRECISION MADE. The specially designed machines and time-proven methods of cutting tip manufacture developed by Victor over a 40-year period, guarantees the user the highest uniform quality and consistent results. Preheating and cutting orifices are accurately finished on polished mandrels to produce true, free-flowing gas jets which permit the use of lower and more economical gas pressures. The tapered seat of each cutting tip is carefully machined to exact dimensions to provide an absolutely uniform and gas-tight fit in Victor Cutting Torches.

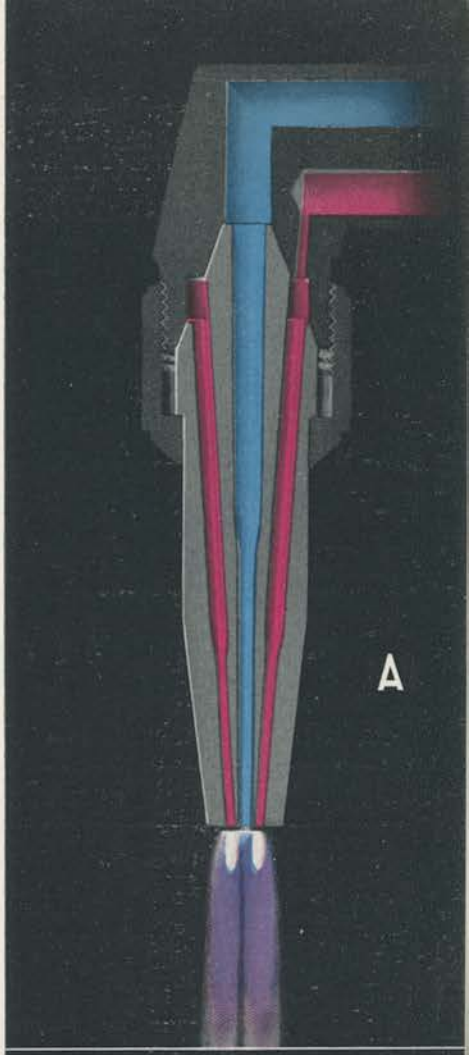
RIGID INSPECTION. Each Victor Cutting Tip is flame tested under standard operating conditions to insure the user perfect flame and cutting jet characteristics.

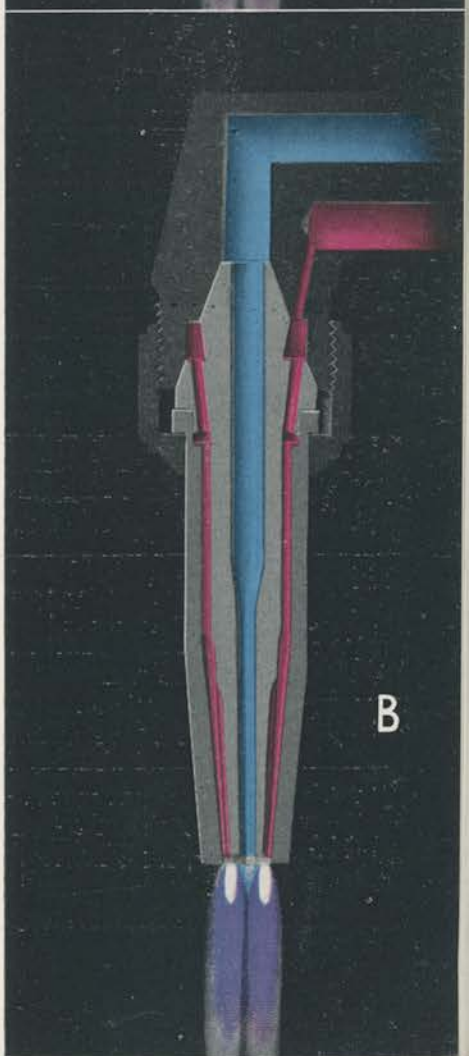
FIGURE A illustrates a typical one-piece oxy-acetylene cutting tip with precision swaged preheating and cutting orifices.

FIGURE B illustrates a typical two-piece cutting tip for use with propane, natural, or city gas.

ILLUSTRATED SELECTION CHARTS. The following pages illustrate the complete selection of cutting tips available for use with Victor "Standard" and "C" Type Cutting Torches and Attachments and the "550" Series Cutting Attachments.

SPECIAL TIPS. Tips for special applications can be designed on request.





VICTOR CUTTING TIPS

USE THE RIGHT SIZE AND PRESSURES. When selecting the proper type and size of tip for a job, it is helpful to refer to the cutting tip data chart (pages 65-66) which is a guide to the metal thickness range for each tip size. It is especially important to use proper speed and operating pressures to achieve the most efficient and economical results.

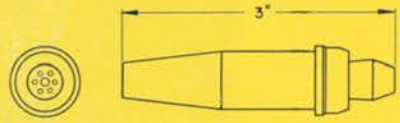
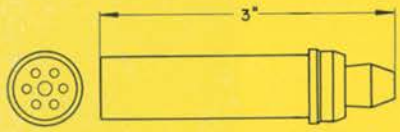
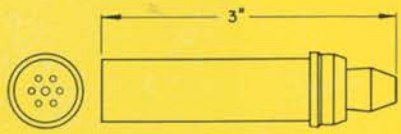
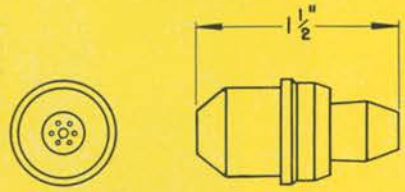
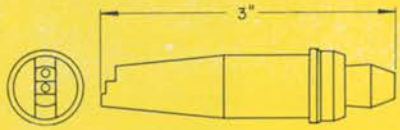
SUITABLE CUTTING TORCHES AND ATTACHMENTS for use with tips illustrated are listed after each application purpose. It is important to follow the capacity recommendations noted in the descriptions of cutting torches and attachments to obtain the most satisfactory results. For instance, "Heavy Duty" Torches have extra capacity and are not recommended for use with small tips. Cutting attachments have limited capacity and are not suited for cutting with very large tips.

TIPS CAPABLE OF USING SEVERAL FUEL GASES include propane tips which can utilize all the petroleum gases, natural gas, city gas, etc. Oxy-acetylene tips can also be used for oxy-hydrogen cutting.

TIPS FOR "STANDARD" TYPE TORCHES

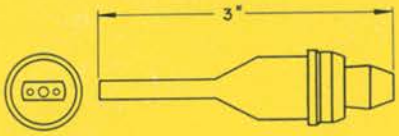
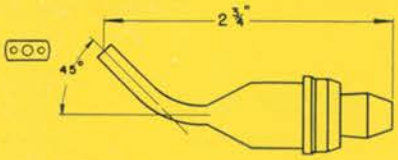
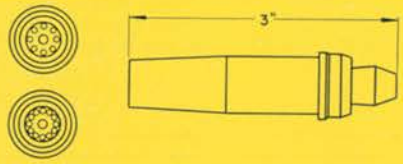
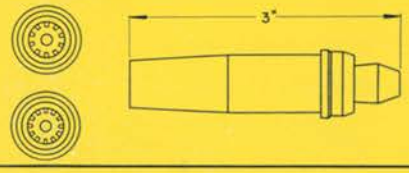
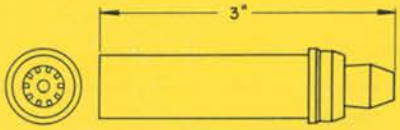
GENERAL PURPOSE

USE WITH TORCH SERIES: 400, 1400, 2000, 4000.
2450 CUTTING ATTACHMENT UP TO SIZE 5 TIP.

TYPE NUMBER	DESCRIPTION	AVAILABLE SIZES	NO. OF PREHEATS	DESCRIPTION
1-100		000 TO 4	4	**ACETYLENE-OXYGEN** PREHEAT: Light. TYPICAL USE: Hand and Machine cutting. Clean plate.
1-101		000 TO 7	6	**ACETYLENE-OXYGEN** PREHEAT: Medium. TYPICAL USE: General hand and machine cutting.
1-115		1 TO 6	6	**ACETYLENE-OXYGEN** **HYDROGEN-OXYGEN** PREHEAT: Extra heavy. TYPICAL USES: For oxy-acetylene cast iron cutting and general oxygen-hydrogen cutting.
1-129		1 TO 4	6	**HYDROGEN-OXYGEN** **ACETYLENE-OXYGEN** PREHEAT: Heavy. TYPICAL USES: Acetylene-Oxygen for underwater cutting with 3900 torch; Oxygen-Acetylene general hand and scrap cutting rusty or painted surfaces.
1-108		0 TO 4	6	**ACETYLENE-OXYGEN** PREHEAT: Medium. TYPICAL USE: Removing boiler tubes. Tip is short for insertion of tip and torch head inside of tube.
1-208		1 and 2	8	**PROPANE-OXYGEN** USE: Same as above.
1-110		00 TO 3	1	**ACETYLENE-OXYGEN "DRAG TYPE"** PREHEAT: Very light. TYPICAL USE: Clean metal. Plate cutting and trimming.

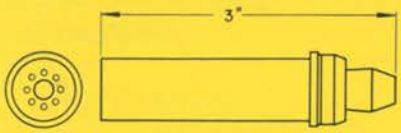
GENERAL PURPOSE, cont.

USE WITH TORCH SERIES: 400, 1400, 2000, 4000.
2450 CUTTING ATTACHMENT UP TO SIZE 5 TIP.

TYPE NUMBER	DESCRIPTION	AVAILABLE SIZES	NO. OF PREHEATS	DESCRIPTION
1-111		00 TO 4	2	**ACETYLENE-OXYGEN** PREHEAT: Medium TYPICAL USE: Clean plate, straight line or circle machine cutting and trimming.
1-112		00 TO 4	2	**ACETYLENE-OXYGEN** PREHEAT: Medium. TYPICAL USE: Cutting close to bulkheads, hand cutting of rivet heads. Machine cutting 45° with torch perpendicular.
1-200		000 TO 6	8	**PROPANE-OXYGEN—ONE PIECE** PREHEAT: Medium with propane, light with natural or city gas. TYPICAL USE: Hand and machine cutting.
1-202		7, 8	12	
2-201		00 TO 6	10	**PROPANE-OXYGEN—TWO PIECE** PREHEAT: Medium with propane, light with natural or city gas. TYPICAL USE: Hand and machine cutting.
2-202		7, 8	12	
2-304		2 TO 7	10	**HYDROGEN-OXYGEN—TWO PIECE** PREHEAT: Heavy. TYPICAL USE: Underwater cutting with 3900 torch.

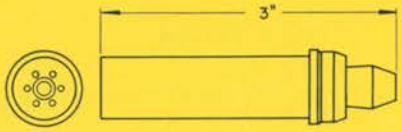
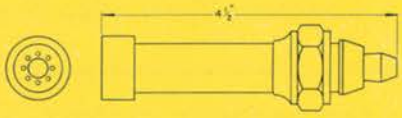
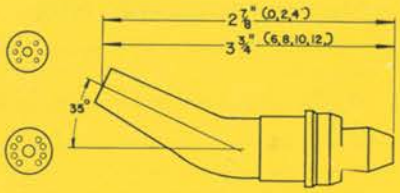
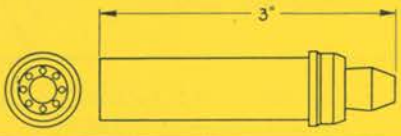
HEAVY CUTTING

USE WITH HD MODELS: 400, 1400, 2000, OR 4000 SERIES TORCHES

TYPE NUMBER	DESCRIPTION	AVAILABLE SIZES	NO. OF PREHEATS	DESCRIPTION
1-103		8, 9, 10	8	**ACETYLENE-OXYGEN** PREHEAT: Heavy. TYPICAL USE: Hand or machine cutting of heavy sections. Heavy Duty, or 4000 series torches preferred for best results.
1-104		8, 9, 10	8	**ACETYLENE-OXYGEN** PREHEAT: Heavy. TYPICAL USE: Hand or machine cutting of heavy sections. Sizes 12, 14, 16, furnished with 430-06 nut. Heavy Duty or 4000 series torches preferred for best results.
1-105		12, 14, 16	8	
1-204		8, 10, 12, 14, 16	12	**PROPANE-OXYGEN—ONE PIECE** PREHEAT: Heavy. TYPICAL USE: Hand and machine cutting of heavy sections. Heavy duty or 4000 series torches preferred for best results. Furnished with 430-06 nut.

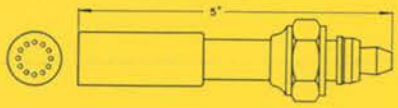
SCARFING, GOUGING, DESEAMING

USE WITH TORCH SERIES: 400, 1400, 2000, 4000

TYPE NUMBER	DESCRIPTION	AVAILABLE SIZES	NO. OF PREHEATS	DESCRIPTION
1-116		1 TO 6	6	**ACETYLENE-OXYGEN** PREHEAT: Medium. TYPICAL USE: Deseaming, gouging, removing defective welds, seams, or excess metal, rivet washing and scarfing.
1-117		7, 8, 10, 12	8	**ACETYLENE-OXYGEN** PREHEAT: Medium. TYPICAL USE: Deseaming, gouging, removing defective metal in steel castings, billets. Has 430-06 nut and end protection ring of tungsten. Use heavy duty torches with tips sizes 10 and above for best results.
1-118		0, 2, 4, 6, 8	6	**ACETYLENE-OXYGEN** PREHEAT: Medium TYPICAL USE: Deseaming, gouging, weld preparation, removing defective welds, washing rivets. Use heavy duty torches with tip sizes 10 and 12 for best results. Chrome plated.
1-119		10, 12	8	
1-207		1 TO 6	8	**PROPANE-OXYGEN** PREHEAT: Medium. TYPICAL USE: Weld preparation, removing defective welds, deseaming, gouging, rivet washing.

HEATING

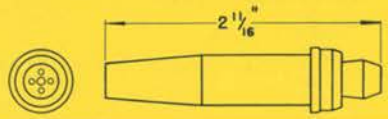
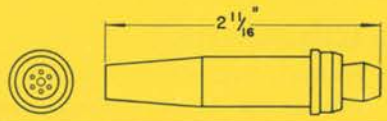
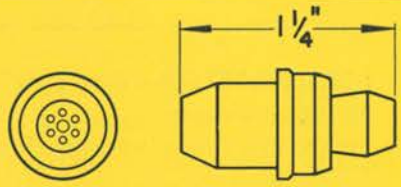
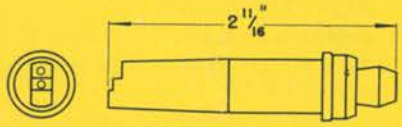
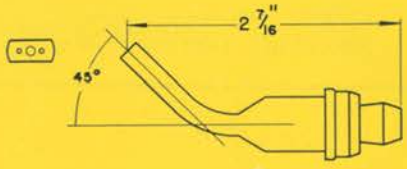
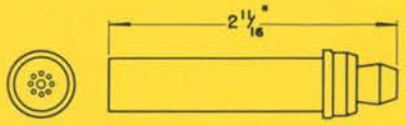
USE WITH TORCH SERIES: 400, 1400, 2000 and 4000, ONLY

TYPE NUMBER	DESCRIPTION	AVAILABLE SIZES	NO. OF PREHEATS	DESCRIPTION
1-126		10, 12	12	**ACETYLENE-OXYGEN** PREHEAT: Heavy. TYPICAL USE: For preheating before welding, descaling, paint burning, etc.
1-209		10, 12	12	**PROPANE-OXYGEN** PREHEAT: Heavy. TYPICAL USE: Preheating, descaling, paint burning, etc.

TYPE 3 SERIES TIPS FOR "C" TYPE TORCHES

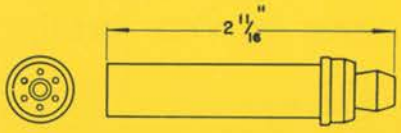
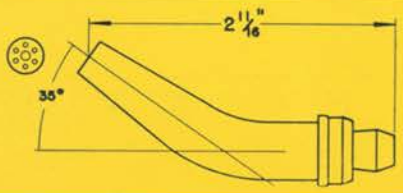
GENERAL PURPOSE

USE WITH TORCH SERIES: C400, C1400, C2000, C1450 CUTTING ATTACHMENT UP TO SIZE 4 TIP.

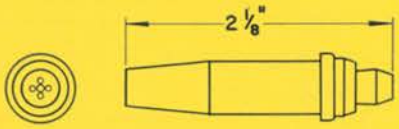
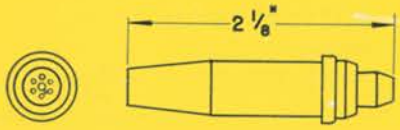
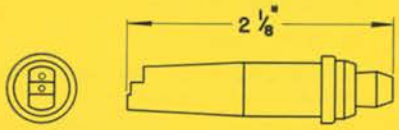
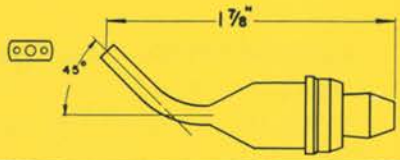
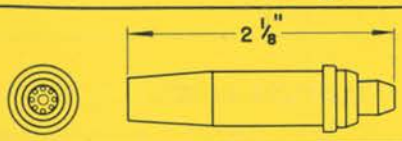
TYPE NUMBER	DESCRIPTION	AVAILABLE SIZES	NO. OF PREHEATS	DESCRIPTION
3-100		000 TO 3	4	**ACETYLENE-OXYGEN** PREHEAT: Light. TYPICAL USE: Hand cutting clean plate.
3-101		00 TO 6	6	**ACETYLENE-OXYGEN** PREHEAT: Medium. TYPICAL USE: General hand cutting.
3-108		1, 2	6	**ACETYLENE-OXYGEN** PREHEAT: Medium. TYPICAL USE: Boiler tube removal. Tip is short to insert head and tip inside of tube.
3-110		00 TO 3	1	**ACETYLENE-OXYGEN—"Drag Type"** PREHEAT: Very light. TYPICAL USE: Cutting and trimming clean plate.
3-112		1 TO 3	2	**ACETYLENE-OXYGEN** PREHEAT: Medium. TYPICAL USE: Hand cutting close to bulkheads, rivet heads.
3-200		00 TO 6	8	**PROPANE-OXYGEN—ONE PIECE** PREHEAT: Medium. TYPICAL USE: General hand cutting.

SCARFING, DESEAMING

USE WITH TORCH SERIES: C400, C1400, C2000

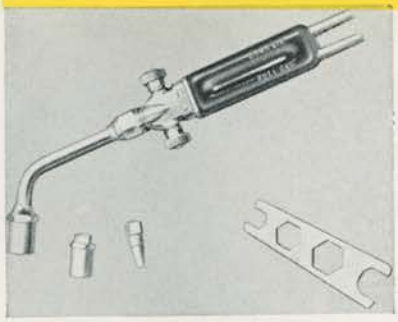
TYPE NUMBER	DESCRIPTION	AVAILABLE SIZES	NO. OF PREHEATS	DESCRIPTION
3-116		3	6	**ACETYLENE-OXYGEN** PREHEAT: Medium. TYPICAL USE: Rivet washing, removing defective metal or welds, removing seams, etc.
3-118		2	6	**ACETYLENE-OXYGEN** PREHEAT: Medium. TYPICAL USE: Rivet cutting, weld preparation, removing defective metal or welds. Chrome plated.

TYPE 5 SERIES TIPS FOR 550-J and 550-100 CUTTING ATTACHMENTS

TYPE NUMBER	DESCRIPTION	AVAILABLE SIZES	NO. OF PREHEATS	DESCRIPTION
5-100		000, 00	4	**ACETYLENE-OXYGEN** PREHEAT: Light. TYPICAL USE: Hand cutting sheet metal and light plate.
5-101		0 TO 2	6	**ACETYLENE-OXYGEN** PREHEAT: Medium. TYPICAL USE: General cutting up to approx. 2 inches.
5-110		00 TO 1	1	**ACETYLENE-OXYGEN—"Drag Type"** PREHEAT: Very light. TYPICAL USE: Cutting, trimming, plate and sheet metal.
5-112		00 TO 2	2	**ACETYLENE-OXYGEN** PREHEAT: Medium. TYPICAL USE: Cutting close to bulkheads, hand cutting of rivet heads.
5-200		0 TO 2	8	**PROPANE-OXYGEN—ONE PIECE** Preheat: Medium. TYPICAL USE: Light plate cutting.

VICTOR for welding

Victor H-1 Unit
Utilizing MODEL 3401—Four-in-One Torch and Type 50 Nozzle



H-1 Unit Shown.

with choice of these tips:

1. **ACETYLENE-OXYGEN** (use Tips A-52, A-54)
2. **ACETYLENE-COMPRESSED AIR** (use Tips A-53)
3. **PROPANE or NATURAL GAS-OXYGEN** (use Tips A-51)
4. **PROPANE or NATURAL GAS-COMPRESSED AIR** (use Tips A-50)

USES VARIETY OF FUEL GASES. The Model 3401 Torch is designed to utilize combinations of oxygen or compressed air with acetylene, propane, natural or city gas by the use of an easy-to-change tip for each combination.

WIDE RANGE OF USES. The Model 3401 Torch is ideal for light gauge welding, silver brazing, and soldering operations on jewelry, dental, plumbing, light production, and repair work. Can also be used with Model 550-100 cutting attachment for light work.

CONSTRUCTION FEATURES include: sturdy, accurate, and conveniently located control valves—a hand fitting durable plastic handle—and over-all compact, well balanced design.

NOZZLE AND TIP DATA. Type 50 Nozzle (page 18) is used for all the suitable tips illustrated on page 19.

H-1 UNIT PACKAGE includes Model 3401 Torch and Type 50 Nozzle; one each 1-A-50, 2-A-50, 1-A-52 Tips, and RT-80 Wrench.

HOSE CONNECTIONS for ¼" I.D. hose—Slip on.

REGULATORS recommended are the SR-20 series, see page 43.

VICTOR MODEL 600 and 600N BUNSEN BURNER TORCHES

for ACETYLENE
or for PROPANE

SPECIFICATIONS

TORCH MODEL	WITH NEEDLE VALVE	ACETYLENE TIPS*	PROPANE TIPS*
600	NO	601, 603, 605, 610, 611 Radiator	632, 633
600-N	YES	SAME	SAME

*Order tips, hose and cylinder connections separately.

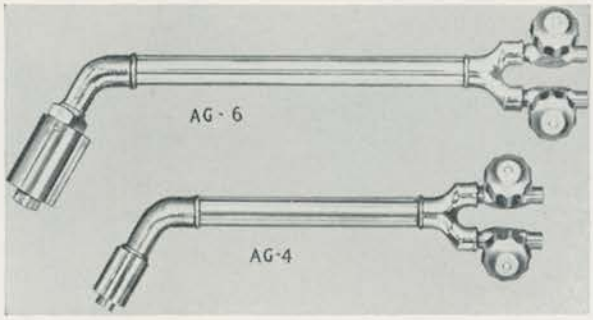
Torch Hose Connection: "B" (9/16"-18 L.H. thread). Refer to page 54 for cylinder connection.

Flame temperature up to 2800° F. are produced by these torches when using acetylene and atmospheric air. They are used extensively by plumbers for sweating joints, electricians for wire soldering and dental laboratories and jewelers for light silver brazing.

Regulators recommended for supplying this torch are the SR-20 series found on page 43. A regulator must be used with the 600-N torch to prevent cylinder pressure building up in the hose.

AIR-GAS TORCHES

PROPANE, BUTANE, CITY OR NATURAL GAS



AG-6 LARGE or AG-4 SMALL

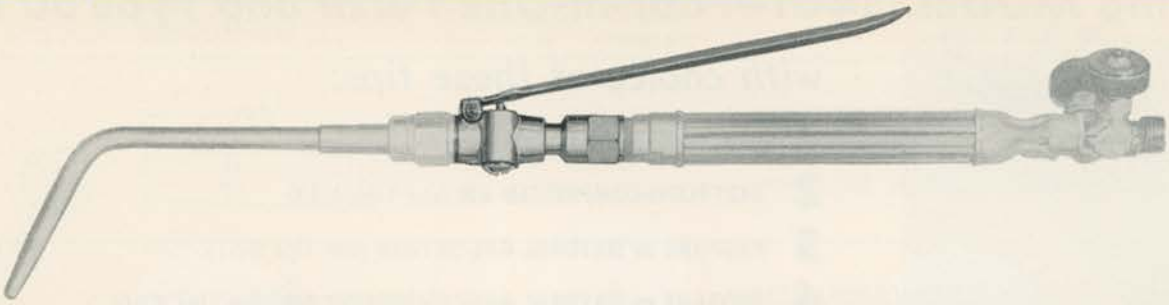
Compressed air-gas torches are economical for preheating work prior to welding operations or for general heating or soldering requiring a directional flame. An air supply of 25 to 75 psi. is required. Gas operating pressures of 1 psi. for natural or city gas or 1 to 4 psi. for propane or butane is sufficient.

AG-4 is 12½" long with 1-1/16" diameter tip.

AG-6 is 16" long with 1⅜" diameter tip.

Hose Connections: "B" (9/16"-18). Air R.H., fuel gas L.H. threads.

VICTOR AUTOMATIC WELDING ATTACHMENT



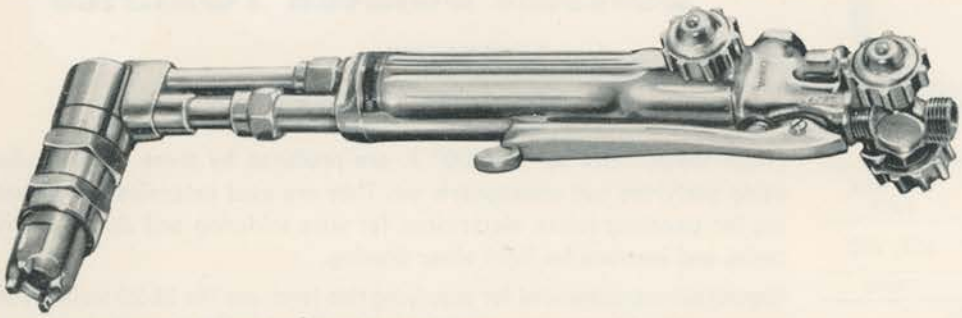
SAVES GAS. An automatic torch is primarily used as a gas saver. On many jobs, especially piece work, the actual welding time is only a fraction of the total time. When using a Victor Automatic Attachment, the only gas used is that for the welding time. As soon as the lever is released, all the flame is extinguished except a very small pilot for relighting. To bring the flame back to the original setting, it is only necessary to depress the operating lever. As much as 75% of the total gas can be saved by using a Victor Automatic Attachment.

CONSTRUCTION FEATURES. The Victor Automatic Attachment is very ruggedly constructed, with brass die forged body and a control lever of stainless steel. The pilot flame is adjusted to the desired intensity by an adjusting screw underneath the front end.

ADAPTABLE TO ALL VICTOR TORCH BUTTS. Automatic torches are available for use with the 100, J Series, and 300 Series (using J and 100 type nozzles) torch butts. All models are for use with single orifice nozzles only in sizes 0 to 7 only. Two-stage regulators are recommended to obtain best operating characteristics.

SPECIFICATIONS

MODEL	USE WITH TORCH BUTTS	USE NOZZLES PAGE	LENGTH	WEIGHT
3201	"J" Series	22, 23	7½"	6 oz.
3202	100, 3401	17, 18, 19	7½"	6 oz.
3203	300 Series	(J) 22, 23	7½"	8 oz.
3204	300 Series	(100) 17, 18, 19	7½"	8 oz.



Model 3900 UNDERWATER CUTTING TORCH

DESIGN BASED ON DIVERS' RECOMMENDATIONS. The proven design of the Model 3900 Underwater Cutting Torch is the result of years of experience and close cooperation with professional divers, who have contributed many of the sound suggestions and ideas that make this torch successful. For full information write for bulletin 319.

OUTSTANDING CONSTRUCTION FEATURES include: large gas control valve wheels with "locator tabs" to determine the amount of valve opening—a cutting oxygen lever that is "self-locking" to help eliminate unnecessary operator fatigue—an air jacket that is easy to adjust and replace under water—and an over-all design which provides for convenient cleaning and repairing of all parts.

WEIGHT—4 lbs. 6 oz.

HOSE CONNECTIONS: "B" (9/16"-18). Air and oxygen R.H., fuel gas L.H. threads.

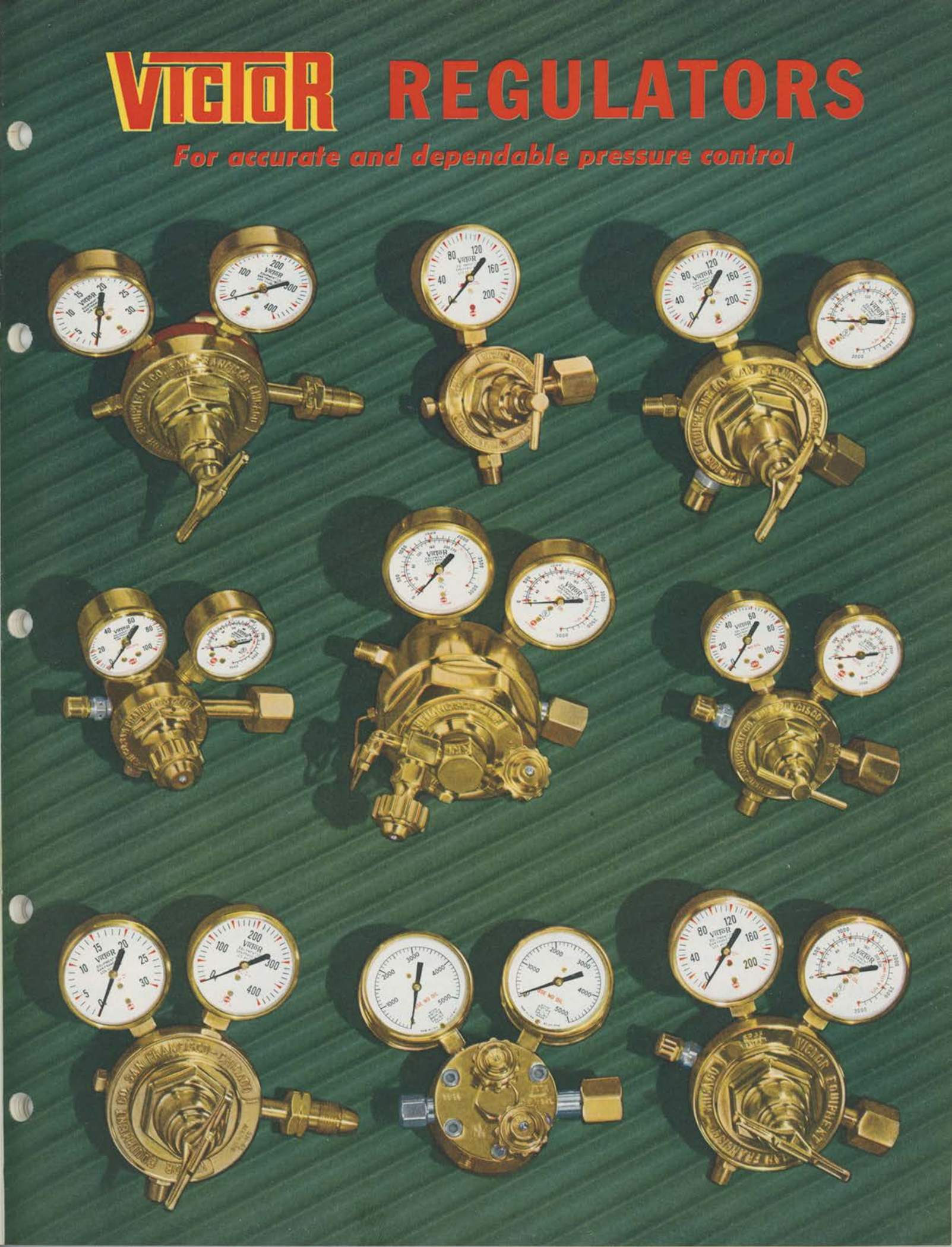
SPECIFICATIONS

MODEL	TIPS USED*		REPLACEMENT AIR JACKET	REPLACEMENT JACKET NUT	REPLACEMENT TIP NUTS
	HYDROGEN	ACETYLENE***			
3900	2-304** 1-129	1-129	3900-01	3900-02	3900-03

*Tips found on pages 32, 33.
**Two-piece.
***For use at maximum of 15 ft. depth and 15 p.s.i. pressure only.

VICTOR REGULATORS

For accurate and dependable pressure control



VICTOR REGULATORS

THE PURPOSE OF A REGULATOR is to reduce a high pressure supply of gas to a useable working pressure and to maintain a satisfactory delivery pressure and flow level for required working conditions. The time proven design of VICTOR regulators insures the user the most dependable and economical means of achieving these results.

SAFETY REGULATORS. VICTOR regulators are known as "Safety Regulators" for five basic reasons:

1. All VICTOR regulators have the "stem type" seat mechanism that closes with the impact of inlet pressure. This type of regulator is protected from seat ignition because the incoming gas loses its heat of compression by expanding into the high pressure chamber before passing over the seat and through the nozzle.
2. Dense die forged bodies and spring housing caps provide maximum strength and safety. All working parts are precision made of carefully selected materials for long life and reliable service.
3. High inlet pressure type regulators have a reliable self-reseating relief valve that insures complete protection of the low pressure chamber and outlet gauge.
4. Diaphragms are protected from excessive and damaging movement by "stops" and rubber cushions.
5. All regulators are provided with a porous sintered bronze inlet filter to protect the internal mechanism from injurious dirt and foreign material.

INDIVIDUALLY TESTED. Every VICTOR regulator is individually tested under actual operating conditions to assure the user completely satisfactory service.

SERVICING. VICTOR regulators are designed so that servicing may be accomplished in the easiest and least expensive way with ordinary repair tools.

A COMPLETE SELECTION of single stage, two stage and special purpose regulators are offered by VICTOR so the prospective user is assured the opportunity to obtain the correct type and size for every application. There are VICTOR regulators for inlet and delivery pressures up to 10,000 psi., and flows up to 50,000 cfh.

REGULATOR CAPACITIES. The recommended cubic feet per hour capacities listed in the specifications of VICTOR regulators are based upon their best performance characteristics. Some extra capacity can be obtained if required. Where more than one gas is listed, the recommended capacity is for the lightest gas.

U-L LISTED. VICTOR regulators are listed under Re-examination Service of Underwriters Laboratories, Inc.

SINGLE STAGE REGULATORS. The excellence of VICTOR design and manufacturing technique has produced the finest single stage regulators obtainable. They are recognized for their trouble-free operational characteristics and service for all types of general welding and cutting operations and manufacturing processes. They are recommended for applications where slight delivery pressure changes—due to decreasing cylinder pressures—are not important factors. VICTOR offers a complete choice of sizes and types of single stage regulators to meet most capacity or delivery pressure requirements.

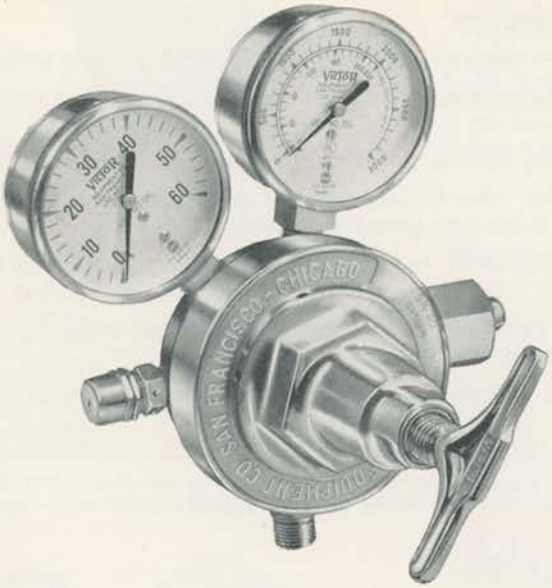
TWO STAGE REGULATORS. Two stage regulators are two regulators in one with the first stage adjusted at the factory to deliver an intermediate pressure to an adjustable second stage, which can be set to deliver the required working pressure. Two stage regulators are used for operations which require a constant delivery pressure over a range of varying inlet pressures. Accurate delivery pressure is maintained until the inlet pressure approaches delivery pressure.

For accurate and dependable pressure control

SINGLE STAGE REGULATORS
MODEL SR40 SERIES

SINGLE STAGE REGULATORS

For General Purpose Welding and Cutting



The Model SR-40 Series Regulators are the result of many years of engineering experience based on field experiments under actual working conditions.

RUGGED DESIGN — SOUND CONSTRUCTION

1. Streamlined gas passages assure adequate flow with a minimum of pressure variance.
2. The large and effective 3¼-inch diameter stainless steel diaphragm results in accurate and sensitive performance.
3. Die forged brass body and spring housing cap affords maximum strength and safety.
4. A positive reseating safety relief valve insures complete protection to the regulator and equipment being supplied. (High inlet pressure models.)
5. An inlet filter of sintered bronze protects the internal mechanism of the regulator from injurious foreign material and is standard equipment on all models.
6. The construction of the SR-40 Series Regulators permits the seat and nozzle to be removed for servicing by removing the back cap.
7. The end of the adjusting screw is equipped with a stainless steel ball for ease of adjustment.

SPECIFICATIONS

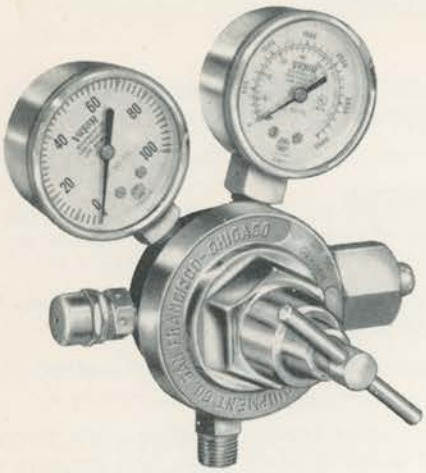
MODEL	GAS	INLET CONNECTION	TYPICAL APPLICATION	DELIVERY RANGE PSI.	H.P. 2½" GAUGE	L.P. 2½" GAUGE	RECOMMENDED CAPACITY C.F.H.
SR40-967	OXYGEN	.903-14 R.H.	WELDING	0-40	3000	60	500
SR40A-967	ARGON, NITROGEN, AIR	.903-14 R.H. (Water Pumped)	PROT. ATMOS.	0-40	3000	60	500
SR40B-973	HELIUM, AIR, ARGON, NITROGEN	.965-14 R.H. (Water Pumped)	PROT. ATMOS.	0-40	3000	60	600
SR40B-974	HELIUM, AIR, ARGON, NITROGEN	.965-14 L.H. (Oil Pumped)	PROT. ATMOS.	0-40	3000	60	600
SR41-968	ACETYLENE	.825-14 R.H. (Commercial)	WELDING AND CUTTING	0-15	400	30	200
SR41-970	ACETYLENE PROPANE	.885-14 L.H. (P.O.L.)	WELDING AND CUTTING	0-15	400	30	200
SR42-982	HYDROGEN NITROGEN	.903-14 L.H. (Linde L.H.) (Oil Pumped)	PROT. ATMOS. AL. WELDING	0-40	3000	60	1500
SR42-983	HYDROGEN HELIUM	.825-14 L.H. (½" Pipe L.H.) (Oil Pumped)	PROT. ATMOS. AL. WELDING	0-40	3000	60	1500
SR43-967	OXYGEN	.903-14 R.H.	WELDING AND CUTTING	0-125	3000	200	600
SR43A-967	ARGON, NITROGEN, AIR	.903-14 R.H. (Water Pumped)	PROT. ATMOS.	0-125	3000	200	600
SR43A-973	ARGON, HELIUM, NITROGEN, AIR	.965-14 R.H. (Water Pumped)	PROT. ATMOS.	0-125	3000	200	600
SR43A-974	ARGON, HELIUM NITROGEN, AIR	.965-14 L.H. (Oil Pumped)	PROT. ATMOS.	0-125	3000	200	600
SR46A-982	HYDROGEN NITROGEN	.903-14 L.H. (Linde L.H.) (Oil Pumped)	CUTTING	0-125	3000	200	1500
SR46A-983	HYDROGEN HELIUM	.825-14 L.H. (½ Pipe L.H.) (Oil Pumped)	CUTTING	0-125	3000	200	1500
SR47-967	OXYGEN	.903-14 R.H.	HEAVY DUTY	0-250	3000	400	1000
SR48-982	HYDROGEN NITROGEN	.903-14 L.H. (Linde L.H.) (Oil Pumped)	HEAVY DUTY	0-250	3000	400	3000
SR48-983	HYDROGEN HELIUM	.825-14 L.H. (½" Pipe L.H.) (Oil Pumped)	HEAVY DUTY	0-250	3000	400	3000
SR49-970	PROPANE	.885-14 L.H. (P.O.L.)	HEATING CUTTING	0-40	400	60	400

NOTE: Outlet connection all regulators "B" (9/16-18), Fuel gases L.H. threads.
Average Weight Model SR40 Series—6 lb. 4 oz.

For complete description of above inlet connections see pages 54-55.

Model SR95 Series Regulators

For General Purpose Welding and Cutting



The Model SR-95 Series Regulators are the result of many years of engineering experience based on field experiments under actual working conditions. They are recommended for medium capacity applications.

RUGGED DESIGN — SOUND CONSTRUCTION

1. Streamlined gas passages assure adequate flow with a minimum of pressure variance.
2. The 2½-inch diameter stainless steel diaphragm gives accurate and sensitive performance.
3. Die forged brass body and spring housing cap affords maximum strength and safety.
4. A positive reseating safety relief valve insures complete protection to the regulator and equipment being supplied. (High inlet pressure models.)
5. An inlet filter of sintered bronze protects the internal mechanism of the regulator from injurious foreign material and is standard equipment on all models.
6. The construction of the SR-95 Series Regulators permits the seat and nozzle to be removed for servicing by removing the back cap.
7. The end of the adjusting screw is equipped with a stainless steel ball for ease of adjustment.

AVAILABLE WITH ONE OR TWO GAUGES

"SR" models are available with both inlet and outlet pressure gauges, "SSR" models have outlet pressure gauges only.

SPECIFICATIONS

	MODEL	GAS	INLET CONNECTION	TYPICAL APPLICATION	DELIVERY RANGE PSI.	H.P. 2" GAUGE	L.P. 2" GAUGE	RECOMMENDED CAPACITY C.F.H.
	SR95-967	OXYGEN	.903-14 R.H.	WELDING AND CUTTING	0-80	3000	100	200
	SR96-968	ACETYLENE	.825-14 R.H. (COMMERCIAL)	WELDING AND CUTTING	0-15	400	30	75
	SR96-970	ACETYLENE PROPANE	.885-14 L.H. (P.O.L.)	WELDING AND CUTTING	0-15	400	30	75
	SR97-982	HYDROGEN NITROGEN	.903-14 L.H. (LINDE L.H.) (Oil Pumped)	CUTTING	0-80	3000	100	600
	SR97-983	HYDROGEN HELIUM	.825-14 L.H. (½ PIPE L.H.) (Oil Pumped)	CUTTING	0-80	3000	100	600
SINGLE GAUGE	SSR95-967	OXYGEN	.903-14 R.H.	WELDING AND CUTTING	0-80	NONE	100	200
SINGLE GAUGE	SSR96-968	ACETYLENE	.825-14 R.H. (COMMERCIAL)	WELDING AND CUTTING	0-15	NONE	30	75
SINGLE GAUGE	SSR96-970	ACETYLENE PROPANE	.885-14 L.H. (P.O.L.)	WELDING AND CUTTING	0-15	NONE	30	75
SINGLE GAUGE	SSR97-982	HYDROGEN NITROGEN	.903-14 L.H. (LINDE L.H.) (Oil Pumped)	CUTTING	0-80	NONE	100	600
SINGLE GAUGE	SSR97-983	HYDROGEN HELIUM	.825-14 L.H. (½ PIPE L.H.) (Oil Pumped)	CUTTING	0-80	NONE	100	600
SINGLE GAUGE	*SSR98-N-985	NITROUS OXIDE	.825-14 R.H.	FOOD PROCESSING	0-200	NONE	400	200
SINGLE GAUGE	*SSR98-NY-897	NITROUS OXIDE	897 YOKE	FOOD PROCESSING	0-200	NONE	400	200

NOTE: Outlet connection all regulators "B" (9/16-18), Fuel gases L.H. threads. For complete description of above inlet connections see pages 54-55.

*Bright chrome plated and pre-set at 200 psi.

Average Weight SR95 Series 3 lbs. 11 oz.

Model VN Series Regulators

The Model VN Series Regulators have been popular with many users since their introduction a number of years ago. Their dependable performance for general welding and cutting operations has firmly established them as a "standard" with many companies.

RUGGED DESIGN — SOUND CONSTRUCTION

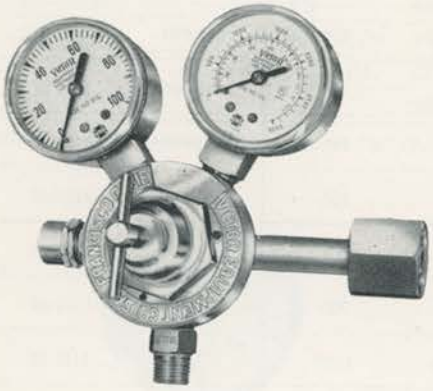
1. The seat holder is provided with a ball bearing movement to provide smooth and positive operation of the seating mechanism.
2. The large 3¼" diameter metal diaphragm provides excellent performance characteristics over a wide range of work requirements.
3. A die forged brass body and spring housing cap provides maximum strength, safety and enduring service.
4. A sintered bronze inlet filter keeps dirt and foreign matter from the internal working parts.
5. The forged manganese bronze adjusting screw is equipped with a stainless steel ball for ease of adjustment.
6. A reliable safety relief valve protects low pressure chamber and outlet gauge on high inlet pressure models.

SPECIFICATIONS

MODEL	GAS	INLET CONNECTION	TYPICAL APPLICATION	DELIVERY RANGE P.S.I.	H.P. 2½" GAUGE	L.P. 2½" GAUGE	RECOMMENDED CAPACITY C.F.H.
VN50-967	OXYGEN	.903-14 R.H.	WELDING & CUTTING	0-125	3000	200	500
VN55-982	HYDROGEN, NITROGEN	.903-14 L.H. (Linde L.H.) (Oil Pumped)	CUTTING	0-40	3000	60	1500
VN55-983	HYDROGEN, HELIUM	.825-14 L.H. (½ Pipe L.H.) (Oil Pumped)	CUTTING	0-40	3000	60	1500
VN60-968	ACETYLENE	.825-14 R.H. (Commercial)	WELDING & CUTTING	0-15	400	30	200
VN60-970	ACETYLENE, PROPANE	.885-14 L.H. (P.O.L.)	WELDING & CUTTING	0-15	400	30	200
VN65-967	OXYGEN	.903-14 R.H.	CUTTING	0-250	3000	400	750
VN66-982	HYDROGEN, NITROGEN	.903-14 L.H. (Linde L.H.) (Oil Pumped)	HEAVY DUTY CUTTING	0-250	3000	400	2000
VN66-983	HYDROGEN, HELIUM	.825-14 L.H. (½ PIPE L.H.) (Oil Pumped)	HEAVY DUTY CUTTING	0-250	3000	400	2000

NOTE: Outlet connection all regulators "B" (9/16-18). Fuel gases, L.H. threads.
Average weight VN Series—6 lbs. 8 oz.

For complete description of above inlet connections see pages 54-55.



Model SR20 Series Regulators

Especially Suited for Light Work

The Model SR-20 Series Regulators have exceptionally fine characteristics for a small regulator. They were especially designed for the smaller gas consumption jobs as encountered by plumbers, dentists, pipefitters, jewelers, sheet metal shops, electricians, hobby shops, and for carbonating water and beverages.

CONSTRUCTION FEATURES

1. The quality neoprene diaphragms have a 1⅝" effective diameter to provide excellent operational characteristics.
2. Die forged brass bodies and spring housing caps, reliable, self-reseating safety valves on high inlet pressure models, and long wearing nozzles and seats are of the same quality construction built into all Victor Regulators.

AVAILABLE WITH ONE OR TWO GAUGES. "SR" models are available with both inlet and outlet pressure gauges, "SSR" models have outlet pressure gauges only, "HSR" models have inlet pressure gauges only.

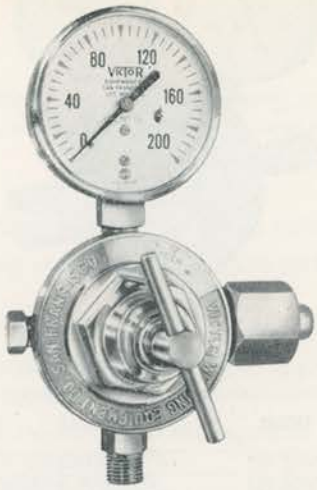
SPECIFICATIONS

MODEL	GAS	INLET CONNECTION	TYPICAL APPLICATION	DELIVERY RANGE P.S.I.	H.P. 2" GAUGE	L.P. 2" GAUGE	RECOMMENDED CAPACITY C.F.H.
SR20-967	OXYGEN	.903-14 R.H.	WELDING	0-80	3000	100	100
SR21-968	ACETYLENE	.825-14 R.H. (Commercial)	WELDING	0-15	400	30	40
SR21-970	ACETYLENE, PROPANE	.885-14 L.H. (P.O.L.)	WELDING	0-15	400	30	40
SSR20-967	OXYGEN	.903-14 R.H.	WELDING	0-80	NONE	100	100
SSR21-968	ACETYLENE	.825-14 R.H. (Commercial)	WELDING	0-15	NONE	30	40
SSR21-970	ACETYLENE, PROPANE	.885-14 L.H. (P.O.L.)	WELDING	0-15	NONE	30	40
SSR21-960	ACETYLENE	.625-20 R.H. ("MC" Tank)	WELDING	0-15	NONE	30	40
HSR-960	ACETYLENE	.625-20 R.H. ("MC" Tank)	WELDING	0-15	400	NONE	40
SSR21-969	ACETYLENE	.895-18 R.H. ("LIT B" Tank)	WELDING	0-15	NONE	30	40
HSR-969	ACETYLENE	.895-18 R.H. ("LIT B" Tank)	WELDING	0-15	400	NONE	40
SSR22-985	CARBON-DIOXIDE	.825-14 R.H.	CARBONATING	0-125	NONE	200	15*
SSR22-N-985	CARBON-DIOXIDE	.825-14 R.H. (Needle Valve Outlet)	CARBONATING	0-125	NONE	200	15*
SSR22-P-985	CARBON-DIOXIDE	.825-14 R.H. (Petcock Outlet)	CARBONATING	0-50	NONE	60	15*
RS250	AIR	(L.H. Inlet) ¼ PIPE (F) In and Out	AIR LINES	0-125	NONE	200	150
RS250-R	AIR	(R.H. Inlet) ¼ PIPE (F) In and Out	AIR LINES	0-125	NONE	200	150

NOTE: Outlet connection all regulators "B" (9/16-18). Fuel gases, L.H. threads.
For complete description of above inlet connections see pages 54-55.
*Depends on water content, inlet and delivery pressure to prevent freeze-up by refrigeration.
Average Weight SR20 Series 2 lbs. 12 oz.

Model L Series Station Regulators

For Reduced Pressure Gas Distribution Systems
Not to be used for Cylinder Service



SPECIFICALLY DESIGNED FOR STATION WORK. The reduced pressures of gas distribution lines require specially designed regulators to insure an accurate working supply of gas. The "L" Series station regulators are available in three sizes to supply large as well as low volumes at a constant, accurate rate.

SAFETY FEATURE FOR FUEL GASES. The small and medium size fuel gas regulators have a Model 60-26 back pressure check valve on the the outlet to protect the regulator as well as the distribution line in case of backflash.

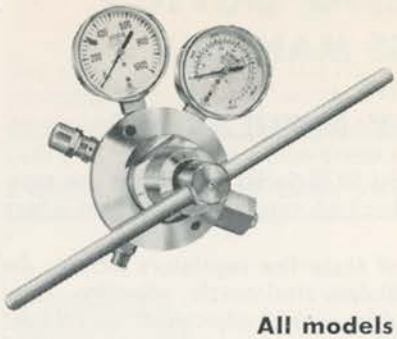
INLET CONNECTIONS. The inlet connections listed below will not fit cylinder valves. See the chart below for station outlet valves or adapter bushings (headers) to be used with the regulators.

Inlet connections, other than listed below, can be furnished at no additional cost. Specify inlet connections required after the regulator model number. Example: L-12-967, L-13A-970, etc. If ordered without inlet and outlet connections, light and medium duty models have ¼"-18NPT(F); heavy duty models have ½"-14NPT(F) inlet and outlet ports.

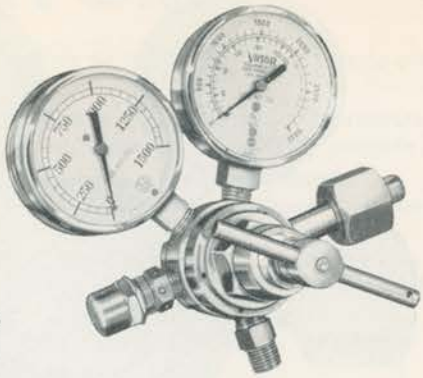
	MODEL	GAS (Specify Type to Be Used)	INLET CONNECTION	OUTLET CONNECTION	DELIVERY RANGE P.S.I.	DELIVERY GAUGE SIZE	RECOMMENDED CAPACITY C.F.H.†	REGULATOR INLET CONNECTION FITS STATION VALVE*	or	ADAPTOR** BUSHING (HEADER)
LIGHT DUTY 1⅝" DIAPHRAGM	L1-965	OXYGEN, NITROGEN HELIUM, ARGON, ETC.	⅞"-14 R.H.	"B" 9/16"-18 RH	0-20	2" - 30 lb.	50	1114-04		1122-06
	L2-965	OXYGEN, NITROGEN HELIUM, ARGON, ETC.	⅞"-14 R.H.	"B" 9/16"-18 RH	0-50	2" - 60 lb.	100	1114-04		1122-06
	L3-965	OXYGEN, NITROGEN HELIUM, ARGON, ETC.	⅞"-14 R.H.	"B" 9/16"-18 RH	0-125	2" - 200 lb.	250	1114-04		1122-06
	L4-966	ACETYLENE, HYDROGEN PROPANE (PET. GAS)	⅞"-14 L.H.	"B" 9/16"-18 LH	0-15	2" - 30 lb.	50	1114-05		1122-07
	L5-966	HYDROGEN PROPANE (PET. GAS)	⅞"-14 L.H.	"B" 9/16"-18 LH	0-50	2" - 60 lb.	100	1114-05		1122-07
	L6-966	HYDROGEN PROPANE (PET. GAS)	⅞"-14 L.H.	"B" 9/16"-18 LH	0-125	2" - 200 lb.	250	1114-05		1122-07
MEDIUM DUTY 2" DIAPHRAGM	L10-965	OXYGEN, NITROGEN HELIUM, ARGON, ETC.	⅞"-14 R.H.	"B" 9/16"-18 RH	0-20	2½" - 30 lb.	500	1114-04		1122-06
	L16-965	OXYGEN, NITROGEN HELIUM, ARGON, ETC.	⅞"-14 R.H.	"B" 9/16"-18 RH	0-50	2½" - 60 lb.	750	1114-04		1122-06
	L12-965	OXYGEN, NITROGEN HELIUM, ARGON, ETC.	⅞"-14 R.H.	"B" 9/16"-18 RH	0-125	2½" - 200 lb.	1200	1114-04		1122-06
	L13A-966	ACETYLENE, HYDROGEN PROPANE (PET. GAS)	⅞"-14 L.H.	"B" 9/16"-18 LH	0-15	2½" - 30 lb.	500	1114-05		1122-07
	L17A-966	HYDROGEN PROPANE (PET. GAS)	⅞"-14 L.H.	"B" 9/16"-18 LH	0-50	2½" - 60 lb.	750	1114-05		1122-07
	L15A-966	HYDROGEN PROPANE (PET. GAS)	⅞"-14 L.H.	"B" 9/16"-18 LH	0-125	2½" - 200 lb.	1200	1114-05		1122-07
HEAVY DUTY 3" DIAPHRAGM	L21-996	OXYGEN, NITROGEN HELIUM, ARGON, ETC.	1"-11½ NPS R.H.	"C" 7/8"-14 RH	0-20	2½" - 30 lb.	1000	1113-01	and	0996-04***
	L22-996	OXYGEN, NITROGEN HELIUM, ARGON, ETC.	1"-11½ NPS R.H.	"C" 7/8"-14 RH	0-50	2½" - 60 lb.	2000	1113-01	and	0996-04
	L23-996	OXYGEN, NITROGEN HELIUM, ARGON, ETC.	1"-11½ NPS R.H.	"C" 7/8"-14 RH	0-125	2½" - 200 lb.	4000	1113-01	and	0996-04
	L24-997	ACETYLENE, HYDROGEN PROPANE (PET. GAS)	1"-11½ NPS L.H.	"C" 7/8"-14 LH	0-15	2½" - 30 lb.	1000	1113-01	and	0997-05
	L25-997	HYDROGEN PROPANE (PET. GAS)	1"-11½ NPS L.H.	"C" 7/8"-14 LH	0-50	2½" - 60 lb.	2000	1113-01	and	0997-05
	L26-997	HYDROGEN PROPANE (PET. GAS)	1"-11½ NPS L.H.	"C" 7/8"-14 LH	0-125	2½" - 200 lb.	4000	1113-01	and	0997-05

† C.F.H. Air at 70° F. and 14.7 Atmos.
Average Weight: L1 to L6—2 lbs. 12 oz.; L10 to L17—3 lbs. 6 oz.; L21 to L26—8 lbs.
For complete description of above inlet connections see pages 54-55.

* ½-14 NPT (M) inlet for 1114-04, 1114-05 valves.
¾-14 NPT (F) inlet and outlet for 1113-01 valve.
** Adaptor 1122-06, 1122-07 has ½-14 NPT (M) inlet x ⅞-14 (M) outlet.
Adaptor 0996-04, 0997-05 has ¾-14 NPT (M) inlet x 1"-11½ NPT (M) outlet.
***L21-L26 Series require both station valve and adaptor bushing.



High DELIVERY PRESSURE REGULATORS



All models equipped with self-reseating safety relief valve to protect the regulator and the equipment being supplied.

VXB50 SERIES REGULATORS are designed for inlet pressures up to 2,500 psi. and delivery pressures up to 500 psi. The 3¼" diameter metal diaphragm, internal mechanism, and the bronze spring housing cap are designed to provide maximum safety and operational characteristics at high delivery pressures.
Average weight 9 lbs.

SR10 SERIES REGULATORS are designed for inlet pressures up to 2,500 psi. and delivery pressures up to 1,000 psi. They have a 1½" diameter metal diaphragm. These regulators have comparatively low cubic foot per hour capacity, but will maintain fixed delivery pressures very accurately on closed systems.
Average weight 4 lbs. 4 oz.

SPECIFICATIONS

MODEL	GAS	INLET CONNECTION	DELIVERY RANGE PSI.	H.P. 2½" GAUGE	L.P. 2½" GAUGE	RECOMMENDED CAPACITY C.F.H.
VXB50-967	OXYGEN	.903-14 R.H.	0-500	3000	1000	600
VXB51-982	HYDROGEN, NITROGEN	.903-14 L.H. (Linde L.H.) (Oil Pumped)	0-500	3000	1000	1800
VXB51-983	HYDROGEN, HELIUM	.825-14 L.H. (½ Pipe L.H.) (Oil Pumped)	0-500	3000	1000	1800
SR10-967	OXYGEN	.903-14 R.H.	0-1000	3000	1500	200
SR11-982	HYDROGEN, NITROGEN	.903-14 L.H. (Linde L.H.) (Oil Pumped)	0-1000	3000	1500	600
SR11-983	HYDROGEN, HELIUM	.825-14 L.H. (½ Pipe L.H.) (Oil Pumped)	0-1000	3000	1500	600
SR12-967	NITROGEN	.903-14 R.H. (Water Pumped)	0-1000	3000	1500	200

Note: Outlet connection all regulators "B" (9/16-18). Fuel gases L.H. threads. For complete description of above Inlet connections see pages 54-55.

Air Regulators

FOR INLET PRESSURES TO 500 P.S.I.

APPLICATION. VICTOR Air Regulators are designed to withstand the shock of intermittent service. They provide accurate and reliable regulation of air pressure on applications such as air cylinders, pneumatic tools and other types of air equipment.

FATIGUE RESISTANT DIAPHRAGM. The high quality neoprene diaphragm assures long, trouble-free service.

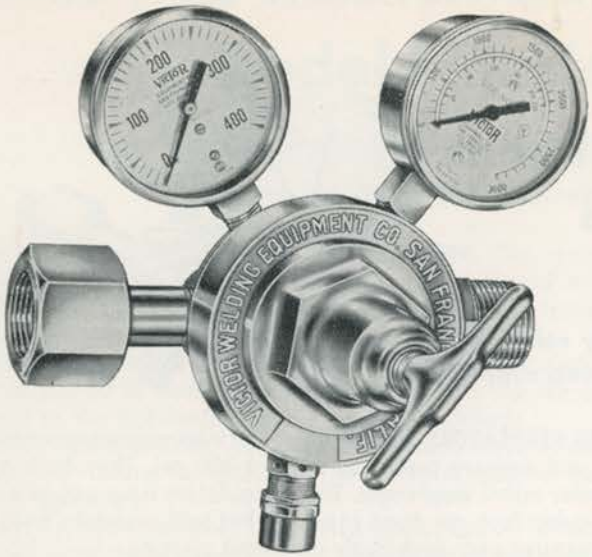
EXCLUSIVE SEAT AND NOZZLE DESIGN. VICTOR Air Regulators have a molded half-round seat that makes a sealing contact with a flat face nozzle. This exclusive VICTOR design virtually eliminates seat failure, and allows full gas flow.

BUILT-IN FILTER SCREEN. A built-in nickel filter screen protects the internal mechanism and the equipment being supplied from dirt or pipe scale, and is readily accessible for cleaning by removing the rear cap of the regulator.

SPECIFICATIONS

MODEL	INLET	OUTLET	DELIVERY RANGE P.S.I.	DELIVERY PRESSURE 2½" GAUGE	EFFECTIVE DIAPHRAGM DIAMETER	RECOMMENDED CAPACITY C.F.H.
R250	¼ PIPE (F)	¼ PIPE (F)	0-150	200	2"	1000
R375	⅜ PIPE (F)	⅜ PIPE (F)	0-150	200	2"	1000
R500	½ PIPE (F)	½ PIPE (F)	0-150	200	3"	4000
R750	¾ PIPE (F)	¾ PIPE (F)	0-150	200	3"	4000

Listed regulators have a left-hand inlet. If right-hand inlet is required place "R" after model number. Example: R250-R.
Average weight: R250, R375—2 lbs. 13 oz.; R500, R750—4 lbs. 14 oz.



Average weight: M Models 8 lbs. HD Models 6 lbs. 14 oz.

Model SR70 Series
SINGLE STAGE MANIFOLD and HIGH CAPACITY REGULATORS

EXTRA LARGE CAPACITY. The Model SR70 Series Regulators are especially designed for manifold and other high capacity applications where extra large flows are required.

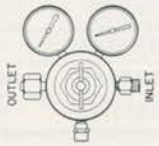
CONSTRUCTION. Typical features of these fine regulators include: die forged regulator body and cap, stainless steel nozzle, adjusting screw with a stainless steel ball at the end for ease of adjustment, nickel inlet filter screen to prevent damage to the internal mechanism by dust and scale, and a large 3¼-inch stainless steel diaphragm.

RELIABLE SAFETY VALVE. The low pressure chamber on high inlet pressure models is protected by a self-reseating safety valve which insures positive protection of equipment being supplied.

DEPENDABLE SERVICE. The careful engineering and accurate workmanship of VICTOR manifold regulators insures reliable service and long life under constant operating conditions.

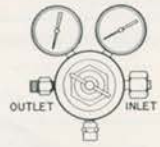
SPECIFICATIONS

MODEL	APPLICATION	GAS AND INLET CONNECTION	DELIVERY RANGE PSI.	H.P. 2½" GAUGE	L.P. 2½" GAUGE	RECOMMENDED CAPACITY C.F.H.
SR70 M	MANIFOLD	OXYGEN, 1"—11½ NPS R.H. (M)	0-250	3000	400	12,000
SR71 M	MANIFOLD	ACETYLENE & PROPANE, 1"—11½ NPS L.H. (M)	0-15	400	30	1,500
SR72 M	MANIFOLD	HYDROGEN, 1"—11½ NPS L.H. (M)	0-250	3000	400	45,000
SR73 M	MANIFOLD	NITROGEN & ARGON, 1"—11½ NPS R.H. (M)	0-250	3000	400	12,000
SR74 M	MANIFOLD	HELIUM, 1"—11½ NPS R.H. (M)	0-250	3000	400	30,000
SR75 M	MANIFOLD	CARBON DIOXIDE, 1"—11½ NPS R.H. (M)	0-250	3000	400	600*
SR70 M 2	MANIFOLD	OXYGEN, 1"—11½ NPS R.H. (M)	0-125	3000	200	8,000
SR72 M 2	MANIFOLD	HYDROGEN, 1"—11½ NPS L.H. (M)	0-125	3000	200	30,000
SR73 M 2	MANIFOLD	NITROGEN & ARGON, 1"—11½ NPS R.H. (M)	0-125	3000	200	8,000
SR74 M 2	MANIFOLD	HELIUM, 1"—11½ NPS R.H. (M)	0-125	3000	200	20,000
SR75 M 2	MANIFOLD	CARBON DIOXIDE, 1"—11½ NPS R.H. (M)	0-125	3000	200	400*



Outlet connection 1"—11½ NPS R.H. (F) on all models.

SR70-967	HEAVY DUTY	OXYGEN, .903"—14 R.H.	0-250	3000	400	12,000
SR71-968	HEAVY DUTY	ACETYLENE, .825"—14 R.H. (Comm.)	0-15	400	30	1,500*
SR71-970	HEAVY DUTY	ACETYLENE & PROPANE, .885"—14 L.H. (P.O.L.)	0-15	400	30	1,500*
SR72-982	HEAVY DUTY	HYDROGEN, .903"—14 L.H. (Linde L.H.) (Oil Pump)	0-250	3000	400	45,000
SR72-983	HEAVY DUTY	HYDROGEN, .825"—14 L.H. (½ Pipe L.H.) (Oil Pump)	0-250	3000	400	45,000
SR73-967	HEAVY DUTY	NITROGEN & ARGON, .903"—14 R.H.	0-250	3000	400	12,000
SR74-983	HEAVY DUTY	HELIUM, .825"—14 L.H. (½ Pipe L.H.) (Oil Pump)	0-250	3000	400	30,000
SR75-985	HEAVY DUTY	CARBON DIOXIDE, .825"—14 R.H.	0-250	3000	400	600**
SR76-973	HEAVY DUTY	ARGON, HELIUM, NITROGEN, .965-14 R.H. (Water Pumped)	0-250	3000	400	30,000 (HE) 12,000 (A, N)
SR76-974	HEAVY DUTY	ARGON, HELIUM, NITROGEN, .965-14 L.H. (Oil Pumped)	0-250	3000	400	30,000 (HE) 12,000 (A, N)



Outlet conn. for ⅜" I.D. hose "C" (⅞"—14). Fuel gas L.H. thread.

Note: To adapt the manifold regulator inlet and outlet connections to old type manifolds, order inlet adapter 0996-08 for oxygen, and 0997-09 for fuel gases and outlet adapter 0996-04 for all gases.

***Multiple cylinder installations.**

****Depends on water content, delivery and inlet pressure to prevent freeze-up by refrigeration.**

REGULATORS FOR CORROSIVE GASES

FOR WET OR DRY GASES. The corrosion resistant requlators listed below are for both wet or dry gases or for dry gases only.

SPECIAL MATERIALS USED. This series of regulators are made of corrosion resistant materials for the specified gas only. They have been proven in field applications to give excellent service. All regulators have a 3¼" effective diameter diaphragm to give maximum sensitivity.

MADE TO ORDER. These regulators are made on order only.

SPECIFICATIONS

MODEL	GAS	DELIVERY RANGE PSI.	H.P. GAUGE PSI.	L.P. GAUGE PSI.	RECOMMENDED CAPACITY C.F.H.
SR100	AMMONIA, WET OR DRY	0-40	200	100	200
SR101	HYDROGEN SULFIDE, WET OR DRY	0-40	400	100	200
SR102	SULPHUR DIOXIDE, WET OR DRY	0-30	100	30	200
SR103	CHLORINE, DRY ONLY	0-40	200	100	200
SR104	CHLORINE, WET OR DRY	0-40	200	100	200
SR105	BORON TRIFLUORIDE, DRY ONLY	0-40	3000	100	200
SR106	HYDROGEN CHLORIDE, DRY	0-40	1000	100	200

For complete description of above inlet connections see pages 54-55.

TWO STAGE REGULATORS

Two-stage regulators are two regulators in one with the first stage adjusted at the factory to deliver an intermediate pressure to an adjustable second stage, which can be set to deliver the required working pressure.

CONSTANT DELIVERY PRESSURE AND FLOW. Two-stage regulators are used for operations which require a constant delivery pressure over a range of varying inlet pressures. Accurate delivery pressure is maintained until the inlet pressure approaches delivery pressure.

A USEFUL SELECTION OF SIZES. VICTOR offers two-stage regulators to meet a wide range of pressure and volume requirements.

Model VTS40 Series Regulators

PROVIDES ACCURATE PRESSURE CONTROL FOR A WIDE RANGE OF APPLICATIONS

PERFORMANCE. The precise two-stage regulation of the Model VTS40 Series Regulators supplies a dependable flow of gas and produces superior operating characteristics for exacting applications. After the regulator has been adjusted the delivery pressure is maintained until the cylinder is almost empty.

HIGHEST QUALITY CONSTRUCTION FEATURES include:

1. Die forged brass bodies and caps to obtain maximum strength and serviceability.
2. Large metal diaphragms—first stage 2" and second stage 3¼"—provide maximum performance of both stages, are fatigue resistant, and will give long, trouble-free service.
3. An inlet filter of sintered bronze protects the internal mechanism from dust, dirt, and scale.
4. A positive reseating safety relief valve between the first and second stage on high inlet pressure models insures complete protection to the regulator and equipment supplied.
5. The adjusting screw is equipped with a stainless steel ball for ease of adjustment.

EASE OF SERVICE. Either stage of the regulator may be serviced by removing the first stage housing.

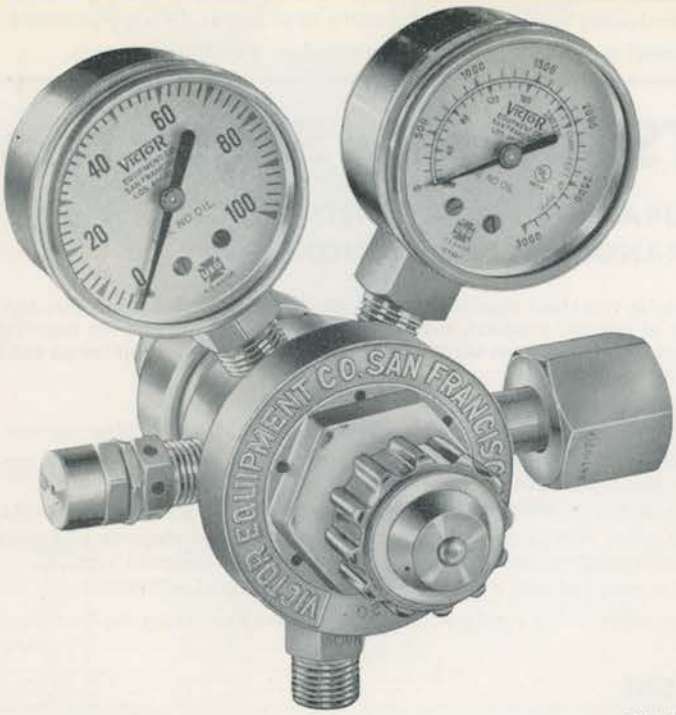
SPECIFICATIONS

MODEL	GAS	INLET CONNECTION	TYPICAL APPLICATION	DELIVERY RANGE PSI.	H.P. 2½" GAUGE	L.P. 2½" GAUGE	RECOMMENDED CAPACITY C.F.H.
VTS40-967	OXYGEN	.903-14 R.H.	WELDING	0-40	3000	60	450
VTS41-968	ACETYLENE	.825-14 R.H. (Commercial)	WELDING	0-15	400	30	200
VTS41-970	ACETYLENE PROPANE	.885-14 L.H. (P.O.L.)	WELDING	0-15	400	30	200
VTS42-982	HYDROGEN NITROGEN	.903-14 L.H. (Linde L.H.) (Oil Pumped)	CUTTING, ALUMINUM WELDING	0-40	3000	60	1350
VTS42-983	HYDROGEN HELIUM	.825-14 L.H. (½ Pipe L.H.) (Oil Pumped)	CUTTING, ALUMINUM WELDING	0-40	3000	60	1350
VTS43-967	OXYGEN	.903-14 R.H.	WELDING AND CUTTING	0-125	3000	200	600
VTS44-967	OXYGEN	.903-14 R.H.	UNDERWATER CUTTING	0-250	3000	400	1000
VTS45-982	HYDROGEN NITROGEN	.903-14 L.H. (Linde L.H.) (Oil Pumped)	UNDERWATER CUTTING	0-250	3000	400	3000
VTS45-983	HYDROGEN HELIUM	.825-14 L.H. (½ Pipe L.H.) (Oil Pumped)	PROTECTIVE ATMOSPHERE	0-250	3000	400	3000
VTS46-967	ARGON NITROGEN	.903-14 R.H. (Water Pumped)	INERT ARC WELDING	40	3000	60	450
VTS46-973	ARGON/HELIUM NITROGEN	.965-14 R.H. (Water Pumped)	INERT ARC WELDING	40	3000	60	450
VTS46-974	ARGON/HELIUM NITROGEN	.965-14 L.H. (Oil Pumped)	PROTECTIVE ATMOSPHERE	40	3000	60	450
VTS47-982	HYDROGEN NITROGEN	.903-14 L.H. (Oil Pumped)	PROTECTIVE ATMOSPHERE	0-125	3000	200	600
VTS48-983	HYDROGEN HELIUM	.825-14 L.H. (½ Pipe L.H.) (Oil Pumped)	PROTECTIVE ATMOSPHERE	0-125	3000	200	1800
VTS49-970	PROPANE	.885-14 L.H. (P.O.L.)	HEATING CUTTING	0-40	400	60	400
VTS50-985	CARBON DIOXIDE	.825-14 R.H.	CARBON-ATING	0-125	200	3000	200*

NOTE: Outlet connection all regulators "B" (9/16-18). Fuel gases L.H. threads.
Average weight VTS40 Series 6 lbs. 14 oz.
*Depends on water content, delivery and inlet pressure to prevent freezing by refrigeration.

For complete description of above inlet connections see pages 54-55.

A *Small* TWO STAGE REGULATOR
VTS20 Series
FOR LIGHT AND MEDIUM WORK



APPLICATIONS. For light and medium welding and cutting requiring accurate and precise two-stage regulation, the Model VTS20 Series Regulators will give excellent performance by maintaining a constant delivery pressure until the inlet pressure approaches the delivery pressure.

QUALITY DESIGN AND CONSTRUCTION. As in all VICTOR apparatus, the Model VTS20 Series Regulators have the finest appearance and design features.

1. Compact size—2½" diameter, 6" long, and weighing 4 pounds, make these regulators desirable for portable applications where weight and size are a factor.
2. They are ruggedly built with die forged bodies and caps to give maximum safety and performance in all applications.
3. The adjusting wheel is fluted for good gripping and has a stainless steel ball at the end of the screw to make adjusting easy.
4. Sintered bronze inlet filter on all models protects the internal mechanism from dirt and scale.
5. High quality neoprene diaphragms assure excellent delivery response, operational characteristics, and long trouble-free service.
6. A reseating safety relief valve between the first and second stage insures protection to the regulator and equipment supplied.

SPECIFICATIONS

MODEL	GAS	INLET CONNECTION	TYPICAL APPLICATION	DELIVERY RANGE PSI.	H.P. 2" GAUGE	L.P. 2" GAUGE	RECOMMENDED CAPACITY C.F.H.
VTS20-967	OXYGEN	.903-14 R.H.	WELDING	0-80	3000	100	300
VTS21-968	ACETYLENE	.825-14 R.H. (Commercial)	WELDING	0-15	400	30	100
VTS21-970	ACETYLENE PROPANE	.885-14 L.H. (P.O.L.)	WELDING	0-15	400	30	100
VTS22-982	HYDROGEN	.903-14 L.H. (Linde L.H.) (Oil Pumped)	CUTTING	0-80	3000	100	900
VTS22-983	HYDROGEN HELIUM	.825-14 L.H. (½ Pipe L.H.) (Oil Pumped)	CUTTING	0-80	3000	100	900
**VTS23-967	ARGON NITROGEN	.903-14 R.H. (Water Pumped)	INERT ARC WELDING	0-80	3000	100	300
**VTS23-973	ARGON/HELIUM NITROGEN	.965-14 R.H. (Water Pumped)	INERT ARC WELDING	0-80	3000	100	300
**VTS23-974	ARGON/HELIUM NITROGEN	.965-14 L.H. (Oil Pumped)	PROTECTIVE ATMOSPHERE	0-80	3000	100	300
VTS23-982	NITROGEN	.903-14 L.H. (Oil Pumped)	PROTECTIVE ATMOSPHERE	0-80	3000	100	300
VTS25-985	CARBON DIOXIDE	.825-14 R.H.	CARBONATING BEVERAGES	0-80	3000	100	150*
**SVTS23-967	ARGON NITROGEN	.903-14 R.H. (Water Pumped)	PROTECTIVE ATMOSPHERE	0-80	3000	NONE	300
**SVTS23-973	ARGON/HELIUM NITROGEN	.965-14 R.H. (Water Pumped)	PROTECTIVE ATMOSPHERE	0-80	3000	NONE	300
**SVTS23-974	ARGON/HELIUM NITROGEN	.965-14 L.H. (Oil Pumped)	PROTECTIVE ATMOSPHERE	0-80	3000	NONE	300
**SVTS23-982	HYDROGEN NITROGEN	.903-14 L.H. (Linde L.H.) (Oil Pumped)	PROTECTIVE ATMOSPHERE	0-80	3000	NONE	900
**SVTS23-983	HYDROGEN HELIUM	.825-14 L.H. (½ Pipe L.H.) (Oil Pumped)	PROTECTIVE ATMOSPHERE	0-80	3000	NONE	900

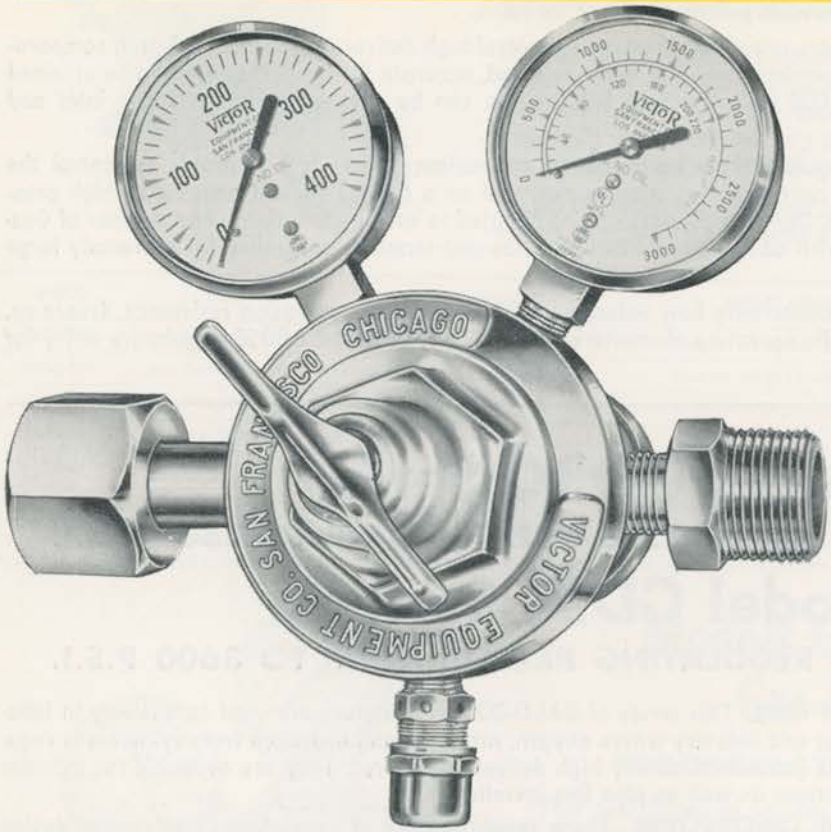
Note: Outlet connection all regulators "B" (9/16-18). Fuel gases L.H. threads. For complete description of above inlet connections see pages 54-55.
Average weight VTS20 Series—4 lbs.
*Depends on water content, inlet and delivery pressure to prevent freeze-up by refrigeration.
**Inlet to outlet 180°. Use with industrial Victrometers.

FOR ACCURATE REGULATION OF LARGE GAS FLOWS

VICTOR MODEL VTS70 SERIES

TWO STAGE REGULATORS

FOR MANIFOLDS AND OTHER HIGH CAPACITY APPLICATIONS



Designed for Maximum Flow with Minimum Pressure Variation

Average weight: M models 8 lbs. 8 oz. HD Models 7 lbs. 6 oz.

Precision Regulation The VTS70 series regulators are specially designed to maintain delivery pressures with dependable accuracy over a wide range of varying inlet pressures. Constant delivery pressure is maintained even when inlet pressures approach outlet pressures.

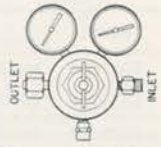
High Capacity Large volume with precision regulation demanded by manifold and other high capacity applications is assured by the reliable and adequate design of these new Model VTS70 series regulators.

Quality Construction Many of VICTOR'S distinctive features developed during 40 years of quality craftsmanship are designed into this fine new regulator. They include die forged brass bodies and caps, stainless steel nozzles, stainless steel diaphragms — first stage 2", second stage 3¼"—and a porous sintered bronze inlet filter to protect all internal parts.

Safety of Operation As in all VICTOR regulators, safety is assured by the dissipation of compression heat of inlet gases in the high pressure chamber before passing over the seat and through the nozzle. Reliable protection of the first and second stage is provided by the new VICTOR Model 0600 safety relief valve on high inlet pressure models.

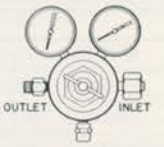
SPECIFICATIONS AND APPLICATION DATA

MODEL	APPLICATION	GAS AND INLET CONNECTION	DELIVERY RANGE P.S.I.	H.P. 2½" GAUGE	L.P. 2½" GAUGE	RECOMMENDED CAPACITY C.F.H.
VTS70 M	Manifold	Oxygen, 1"—11½ NPS R.H. (M)	0-250	3000	400	6,000
VTS71 M	Manifold	Acetylene and Propane, 1"—11½ NPS L.H. (M)	0-15	400	30	800
VTS72 M	Manifold	Hydrogen, 1"—11½ NPS L.H. (M)	0-250	3000	400	20,000
VTS73 M	Manifold	Nitrogen and Argon, 1"—11½ NPS R.H. (M)	0-250	3000	400	6,000
VTS74 M	Manifold	Helium, 1"—11½ NPS R.H. (M)	0-250	3000	400	15,000
VTS75 M	Manifold	Carbon Dioxide, 1"—11½ NPS R.H. (M)	0-250	3000	400	400**
VTS70 M 2	Manifold	Oxygen, 1"—11½ NPS R.H. (M)	0-125	3000	200	6,000
VTS72 M 2	Manifold	Hydrogen, 1"—11½ NPS L.H. (M)	0-125	3000	200	20,000
VTS73 M 2	Manifold	Nitrogen and Argon, 1"—11½ NPS R.H. (M)	0-125	3000	200	6,000
VTS74 M 2	Manifold	Helium, 1"—11½ NPS R.H. (M)	0-125	3000	200	15,000
VTS75 M 2	Manifold	Carbon Dioxide, 1"—11½ NPS R.H. (M)	0-125	3000	200	400**



Outlet connection 1"—11½ NPS R.H. (F) on all models.

VTS70-967	Heavy Duty	Oxygen, .903"—14 R.H.	0-250	3000	400	6,000
VTS71-968	Heavy Duty	Acetylene, .825"—14 R.H. (Comm.)	0-15	400	30	800*
VTS71-970	Heavy Duty	Acetylene, Propane, .885"—14 L.H. (POL.)	0-15	400	30	800*
VTS72-982	Heavy Duty	Hydrogen, .903"—14 L.H. (Linde L.H.)	0-250	3000	400	20,000
VTS72-983	Heavy Duty	Hydrogen, .825"—14 L.H. (½" Pipe L.H.)	0-250	3000	400	20,000
VTS73-967	Heavy Duty	Nitrogen, Argon, .903"—14 R.H.	0-250	3000	400	6,000
VTS74-983	Heavy Duty	Helium, .825"—14 L.H. (½" Pipe L.H.)	0-250	3000	400	15,000
VTS75-985	Heavy Duty	Carbon Dioxide, .825"—14 R.H.	0-250	3000	400	400**
VTS76-973	Heavy Duty	Argon, Helium, Nitrogen, .965"—14 R.H. (Water Pumped)	0-250	3000	400	15,000 (HE) 6,000 (A, N)
VTS76-974	Heavy Duty	Argon, Helium, Nitrogen, .965"—14 L.H. (Oil Pumped)	0-250	3000	400	15,000 (HE) 6,000 (A, N)



Outlet conn. "C" (⅞-14) for ⅜" I.D. hose. Fuel Gases. L.H. thread.

Note: To adapt the manifold regulator inlet and outlet connections to old type manifolds order inlet adaptor 0996-08 for oxygen, nitrogen, or helium and 0997-09 for fuel gases and outlet adaptor 0996-04 for all gases.

*Multiple cylinder installations.

**Depends on water content, inlet and delivery pressure to prevent freeze-up by refrigeration.

For complete description of above inlet connections see pages 54-55.

GAS-O-DOME REGULATORS

WHY A GAS-O-DOME REGULATOR? For delivery pressures above 500 p.s.i. and high gas volume it becomes impractical to control regulator pressures by the action of an adjusting screw compressing a spring against a large diaphragm.

GAS-O-DOME OPERATION. The delivery pressure of a GAS-O-DOME Regulator is controlled by varying the gas pressure that is applied to the upper surface of the diaphragm. This control pressure is adjusted by two valves located on top of the regulator dome. To **increase** the delivery pressure, gas from the inlet side of the regulator is bled through one of these valves into the dome. To **reduce** the delivery pressure, gas from the dome is bled into the atmosphere through the other valve.

WIDE PRESSURE AND FLOW RANGE. Gas-O-Dome Regulators are generally used to control high delivery pressures, although comparatively low pressures can be controlled equally as well. Depending upon the model selected, accurate delivery pressures can be attained from 50 p.s.i. to 5,000 p.s.i. with inlet pressures up to 5,000 p.s.i. Flows to 1,200 c.f.m. can be obtained with maximum inlet and outlet pressures.

ADAPTABLE FOR REMOTE CONTROL. The Gas-O-Dome Regulators are invaluable in applications where it is desirable to control the delivery pressure at a distance from the apparatus. The control valves may be mounted on a remote control panel with high pressure tubing piped to the regulator. On special order Gas-O-Dome Regulators can be adapted to such installations. Any number of Gas-O-Dome Regulators can also be manifolded in parallel with domes manifolded in series and remotely controlled for extremely large volume, high pressure applications.

ENGINEERING ADVICE AVAILABLE. For special problems concerning flow volumes, delivery pressures, corrosion resistance, freeze-up, etc., contact VICTOR'S Engineering Department. For specific operating characteristics on GD30, GD31, and GD50 Regulators write for Victor's Gas-O-Dome Bulletin.

Model GD30 Series

FOR REGULATING PRESSURES UP TO 2500 P.S.I.

Model GD31 Series

FOR REGULATING PRESSURES UP TO 3600 P.S.I.

WIDELY USED. This series of GAS-O-DOME Regulators are used extensively in laboratories and industry where oxygen, nitrogen, and hydrogen from cylinders is regulated to produce relatively high delivery pressures. They are available for cylinder connections as well as pipe line installations.

STRONG CONSTRUCTION. These regulators are of very strong and rugged design to withstand full supply pressures in the inlet chamber, the delivery pressure chamber and the dome pressure chamber. Parts such as seats and nozzles are easily replaced with standard tools, if servicing is necessary.

HIGH VOLUME DELIVERY. Volumes up to 1,200 c.f.m. at maximum delivery pressures can be reached under controlled conditions.

SPECIFICATIONS

MODEL	GAS	INLET CONNECTION	OUTLET CONNECTION	DELIVERY RANGE P.S.I.	INLET 2½" GAUGE	OUTLET 2½" GAUGE
GD30-250	Any Non-Corrosive	Adaptor GD40-14—¼"-18 NPT (F)	Adaptor GD-40-14—¼"-18 NPT (F)	0-2500	3000	3000
GD30-375	Any Non-Corrosive	Adaptor GD40-15—⅜"-18 NPT (F)	Adaptor GD40-15—⅜"-18 NPT (F)	0-2500	3000	3000
GD30-500	Any Non-Corrosive	Adaptor 0916-10—½"-14 NPT (F)	Adaptor 0916-10—½"-14 NPT (F)	0-2500	3000	3000
GD30-967	Oxygen, Nitrogen	.903"-14 R.H.	Specify*	0-2500	3000	3000
GD30-982	Hydrogen, Nitrogen	.903"-14 L.H. (Linde L.H.) (Oil Pumped)	Specify*	0-2500	3000	3000
GD30-983	Hydrogen, Helium	.825"-14 L.H. (½" Pipe L.H.) (Oil Pumped)	Specify*	0-2500	3000	3000
GD31-250	Any Non-Corrosive	Adaptor GD40-14—¼"-18 NPT (F)	Adaptor GD-40-14—¼"-18 NPT (F)	0-3600	5000	5000
GD31-375	Any Non-Corrosive	Adaptor GD40-15—⅜"-18 NPT (F)	Adaptor GD40-15—⅜"-18 NPT (F)	0-3600	5000	5000
GD31-500	Any Non-Corrosive	Adaptor 0916-10—½"-14 NPT (F)	Adaptor 0916-10—½"-14 NPT (F)	0-3600	5000	5000
GD31-967	Oxygen, Nitrogen	.903"-14 R.H.	Specify*	0-3600	5000	5000
GD31-982	Hydrogen, Nitrogen	.903"-14 L.H. (Linde L.H.) (Oil Pumped)	Specify*	0-3600	5000	5000
GD31-983	Hydrogen, Helium	.825"-14 L.H. (½" Pipe L.H.) (Oil Pumped)	Specify*	0-3600	5000	5000

*Outlet Adaptors GD-40-14 is ¼"-18 NPT (F), GD40-15 is ⅜"-18 NPT (F), 0916-10 is ½"-14 NPT (F), GD40-12 is "B" (9/16"-18 RH) (M).
Average weight 14 lbs.

For complete description of above inlet connections see pages 54-55.

Model GD50 Series Gas-O-Dome Regulators

FOR REGULATING PRESSURES UP TO 5,000 PSI.

RUGGED CONSTRUCTION. The Model GD50 Series Regulators are very ruggedly constructed to control pressures up to 5,000 p.s.i. with complete safety.

CAPACITY. Up to 500 c.f.m. can be obtained under maximum inlet pressure conditions. Where delivery pressures are greater than 3,100 p.s.i., the GD50 Series will deliver greater volumes than the GD31 Regulators.

EASE OF REGULATION. The dome control valves have good gripping surfaces for ease of quick and accurate regulation. Delivery pressures can be readily set by opening the "load" valve until the required pressure is indicated on the delivery pressure gauge. To reduce the delivery pressure, the bleed valve is opened momentarily until the reduced pressure is indicated on the delivery pressure gauge.

MAINTENANCE. Parts subject to wear, such as the seats, nozzles, and dome control valves, are designed for ease of service when necessary.

MODEL	GAS	INLET CONNECTION	OUTLET CONNECTION	DELIVERY RANGE P.S.I.	INLET 2½" GAUGE	OUTLET 2½" GAUGE	WEIGHT
GD50-250	Any Non-Corrosive	Adaptor GD40-14—¼"-18 NPT (F)	Adaptor GD-40-14—¼"-18 NPT (F)	0-5000	5000	5000	21 Pounds
GD50-375	Any Non-Corrosive	Adaptor G40-15—⅜"-18 NPT (F)	Adaptor GD40-15—⅜"-18 NPT (F)	0-5000	5000	5000	21 Pounds
GD50-500	Any Non-Corrosive	Adaptor 0916-10—½"-14 NPT (F)	Adaptor 0916-10—½"-14 NPT (F)	0-5000	5000	5000	21 Pounds
GD50-967	Oxygen, Nitrogen	.903"-14 R.H.	Specify*	0-5000	5000	5000	21 Pounds
GD50-982	Hydrogen, Nitrogen	.903"-14 L.H. (Linde L.H.) (Oil Pumped)	Specify*	0-5000	5000	5000	21 Pounds
GD50-983	Hydrogen, Helium	.825"-14 L.H. (½ Pipe L.H.) (Oil Pumped)	Specify*	0-5000	5000	5000	21 Pounds

The above regulators with connections specified are the most popular. If other inlet or outlet connections are required specify on order.
*Outlet Adaptors GD40-14 is ¼"-18 NPT (F), GD40-15 is ⅜"-18 NPT (F), 0916-10 is ½"-14 NPT (F), GD40-12 is "B" (9/16"-18 RH) (M).

Models GD61A and GD62 Series Gas-O-Dome Regulators

FOR REGULATING PRESSURES UP TO 5,000 PSI.

This new series of smaller capacity Gas-O-Dome Regulators supplement the GD30 and GD50 Series Regulators. They weigh 6½ lbs., and the over-all dimensions are 4" x 6" x 6". The body is made of 3" diameter bronze.

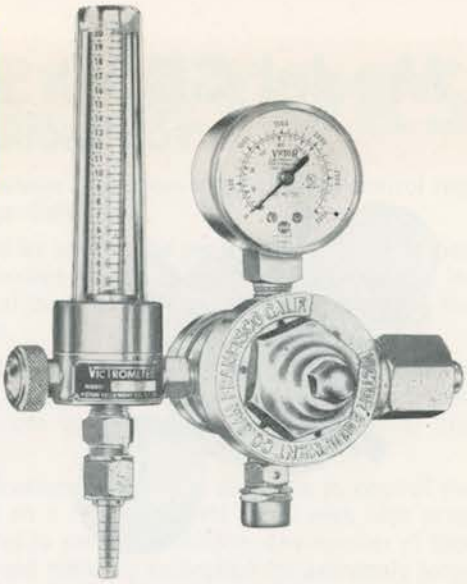
DESIGN FEATURES INCLUDE: Control valves in the body and a unit seat assembly designed for ease of inspection. Operating performance is exceptionally good in relation to its size.

MODEL	GAS	INLET CONNECTION	OUTLET CONNECTION	L. P. & H. P. 2½" GAUGE	DELIVERY RANGE P. S. I.	RECOMMENDED CAPACITY C.F.H.
GD61A-250	Any Non-Corrosive	GD40-14—¼"-18 NPT (F)	GD40-14—¼"-18 NPT (F)	3000	0-2500	6000 Air
GD61A-375	Any Non-Corrosive	GD40-15—⅜"-18 NPT (F)	GD40-15—⅜"-18 NPT (F)	3000	0-2500	6000 Air
GD61A-500	Any Non-Corrosive	0916-10—½"-14 NPT (F)	0916-10—½"-14 NPT (F)	3000	0-2500	6000 Air
GD61A-967	Oxygen, Nitrogen	.903"-14 R.H.	GD40-14—¼"-18 NPT (F)	3000	0-2500	15000 Helium 6000 Oxygen, Nitrogen
GD61A-982	Hydrogen, Nitrogen	.903"-14 L.H.	GD40-14—¼"-18 NPT (F)	3000	0-2500	20000 Hydrogen
GD61A-983	Hydrogen, Helium	.825"-14 LH.	GD40-14—¼"-18 NPT (F)	3000	0-2500	20000 Hydrogen
GD61A-973	Argon, Helium, Nitrogen, Air	.965"-14 RH (Water Pumped)	GD40-14—¼"-18 NPT (F)	3000	0-2500	5000 Argon
GD61A-974	Argon, Helium, Nitrogen, Air	.965"-14 L.H. (Oil Pumped)	GD40-14—¼"-18 NPT (F)	3000	0-2500	5000 Argon
GD62-250	Any Non-Corrosive	GD40-14—¼"-18 NPT (F)	GD40-14—¼"-18 NPT (F)	5000	0-5000	8000 Air
GD62-375	Any Non-Corrosive	GD40-15—⅜"-18 NPT (F)	GD40-15—⅜"-18 NPT (F)	5000	0-5000	8000 Air
GD62-500	Any Non-Corrosive	0916-10—½"-14 NPT (F)	0916-10—½"-14 NPT (F)	5000	0-5000	8000 Air
GD62-967	Oxygen, Nitrogen	.903"-14 R.H.	GD40-14—¼"-18 NPT (F)	5000	0-5000	20000 Helium 8000 Oxygen, Nitrogen
GD62-982	Hydrogen, Nitrogen	.903"-14 L.H.	GD40-14—¼"-18 NPT (F)	5000	0-5000	30000 Hydrogen
GD62-983	Hydrogen, Helium	.825"-14 LH.	GD40-14—¼"-18 NPT (F)	5000	0-5000	30000 Hydrogen
GD62-973	Argon, Helium, Nitrogen, Air	.965"-14 RH (Water Pumped)	GD40-14—¼"-18 NPT (F)	5000	0-5000	7000 Argon
GD62-974	Argon, Helium, Nitrogen, Air	.965"-14 L.H. (Oil Pumped)	GD40-14—¼"-18 NPT (F)	5000	0-5000	7000 Argon

Industrial Victrometer and Victrometer-Regulator Unit

Model V SERIES INDUSTRIAL VICTROMETER

Models VTS2020 and SR2020 SERIES REGULATOR-VICTROMETER COMBINATION UNITS



The **VICTROMETER** is a simple, sturdy, compact and precision built instrument for the accurate measurement of gas flow. It was specifically designed to provide a reliable, efficient and reasonably priced flowmeter for the laboratory, gas shielded arc welding, and a variety of industrial applications.

OUTSTANDING FEATURES

1. Simplicity of design.
2. Accurately calibrated Pyrex glass tube.
3. Smooth operating needle valve.
4. Three ranges of flow are available for each listed gas.
5. Positive "O" ring seals.
6. Operates on a wide inlet pressure range of 10 to 100 p.s.i.
7. VICTROMETERS for other non-corrosive gases than listed are available on request, with special scale calibrated in millimeters and a capacity curve furnished for interpretations of scale readings.

The **REGULATOR-VICTROMETER** combination provide a compact unit assembly for accurate regulation and measurement of gas flow. They are especially suited for applications such as laboratory work, gas shielded arc welding, and a variety of industrial applications.

TWO-STAGE REGULATION. The Victor two-stage VTS20 Series Regulators provide a constant delivery pressure to the VICTROMETER and readjustment of the VICTROMETER is not required, from full to almost empty cylinder contents.

SINGLE-STAGE REGULATION. Outlet pressure variation, due to decreasing inlet pressure, is minimized by a special seat and nozzle design plus a sensitive high quality neoprene diaphragm.

DESIGN FEATURES INCLUDE:

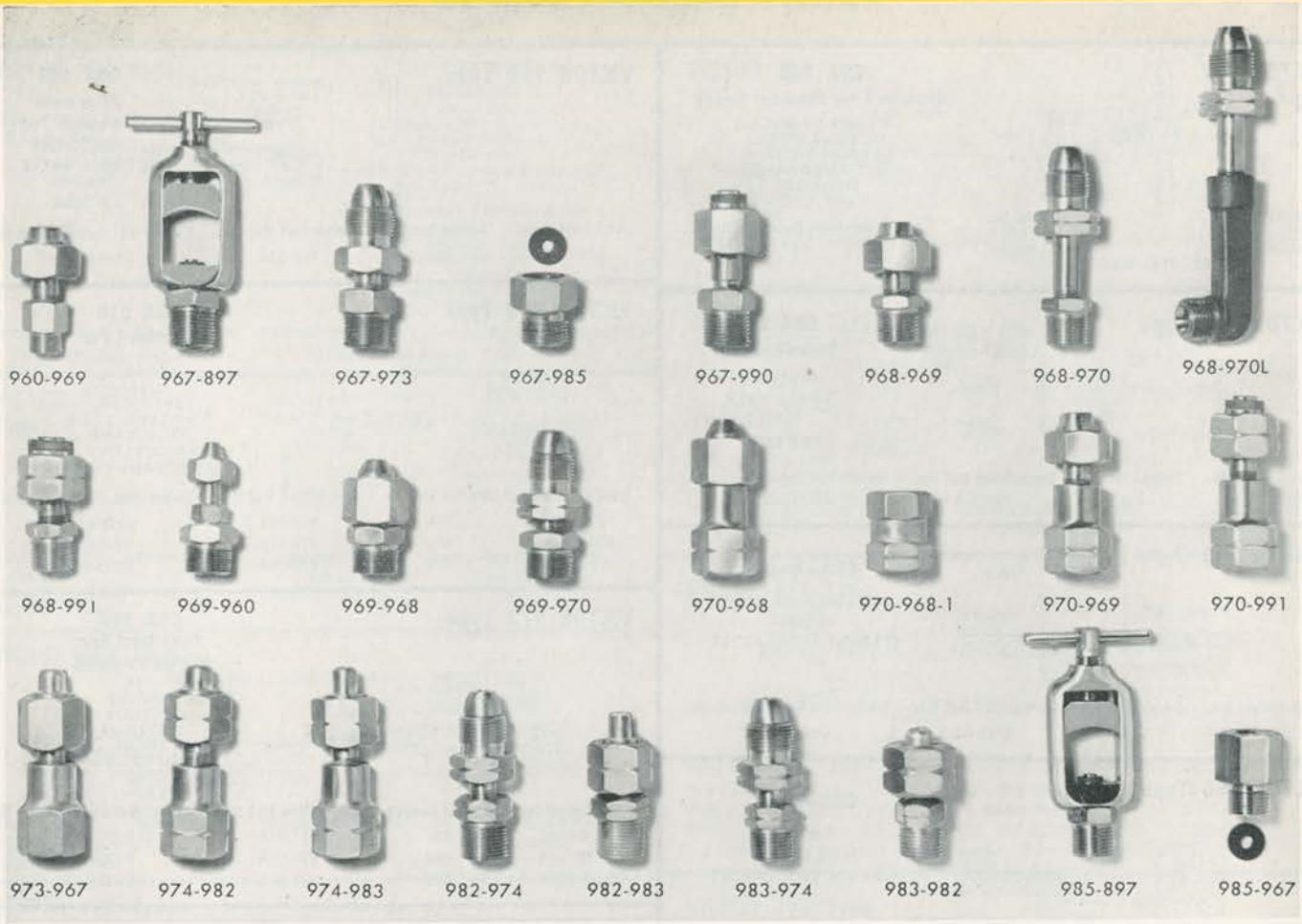
1. Die forged brass body and caps—an efficient porous metal inlet filter—highest quality flexible neoprene diaphragms for maximum response—a reliable self-reseating relief valve.
2. The regulator is preset and locked at the factory to deliver a constant pressure of 25 lbs. to the VICTROMETER. Cylinder contents and pressure can be readily checked on the inlet pressure gauge.
3. Victor Safety Regulator design permits the regulators to close with the impact force of the inlet pressure, thus protecting the low pressure areas before establishing a safe regulated outlet flow.

VICTROMETER ONLY MODEL NO.**	SR2020 SERIES SINGLE-STAGE COMBINATION MODEL NO.	VTS2020 SERIES TWO-STAGE COMBINATION MODEL NO.	GAS	REGULATOR INLET CONNECTION	VICTROMETER RANGE C.F.H.		TUBE NUMBER	FLOAT NUMBER
					Argon	Helium		
V-0120	SR2020-967	VTS2020-967	Air	.903-14 R.H.	0-19		1015-03MF	1008-01
V-0121	SR2021-967	VTS2021-967	Air	.903-14 R.H.	0-40		1015-04AB	1405-20
V-0122	SR2022-967	VTS2022-967	Air	.903-14 R.H.	0-75		1015-05SB	1405-08
	SR2020-973	VTS2020-973	Air	.965-14 R.H.	0-19		1015-03MF	1008-01
	SR2021-973	VTS2021-973	Air	.965-14 R.H.	0-40		1015-04AB	1405-20
	SR2022-973	VTS2022-973	Air	.965-14 R.H.	0-75		1015-05SB	1405-08
V-0123	SR2323-967	VTS2323-967	Argon	.903-14 R.H.	0-16		1015-06MF	1008-01
V-0124	SR2324-967	VTS2324-967	Argon	.903-14 R.H.	0-35		1015-07AB	1405-20
V-0125	SR2325-967	VTS2325-967	Argon	.903-14 R.H.	0-65		1015-08SB	1405-08
	SR2323-973	VTS2323-973	Argon	.965-14 R.H.	0-16		1015-06MF	1008-01
	SR2324-973	VTS2324-973	Argon	.965-14 R.H.	0-35		1015-07AB	1405-20
	SR2325-973	VTS2325-973	Argon	.965-14 R.H.	0-65		1015-08SB	1405-08
V-0126	SR2326-973	VTS2326-973	Helium	.965-14 R.H.	0-50		1015-09MF	1008-01
V-0127	SR2327-973	VTS2327-973	Helium	.965-14 R.H.	0-110		1015-10AB	1405-20
V-0128	SR2328-973	VTS2328-973	Helium	.965-14 R.H.	0-200		1015-11SB	1405-08
	SR2326-983	VTS2326-983	Helium	.825-14 L.H.	0-50		1015-09MF	1008-01
	SR2327-983	VTS2327-983	Helium	.825-14 L.H.	0-110		1015-10AB	1405-20
	SR2328-983	VTS2328-983	Helium	.825-14 L.H.	0-200		1015-11SB	1405-08
V-0129	SR2329-967	VTS2329-967	Nitrogen	.903-14 R.H.	0-20		1015-12MF	1008-01
V-0130	SR2330-967	VTS2330-967	Nitrogen	.903-14 R.H.	0-45		1015-13AB	1405-20
V-0131	SR2331-967	VTS2331-967	Nitrogen	.903-14 R.H.	0-80		1015-14SB	1405-08
	SR2329-973	VTS2329-973	Nitrogen	.965-14 R.H.	0-20		1015-12MF	1008-01
	SR2330-973	VTS2330-973	Nitrogen	.965-14 R.H.	0-45		1015-13AB	1405-20
	SR2331-973	VTS2331-973	Nitrogen	.965-14 R.H.	0-80		1015-14SB	1405-08
V-0132	SR2432-982	VTS2232-982	Hydrogen	.903-14 L.H.	0-75		1015-15MF	1008-01
V-0133	SR2433-982	VTS2233-982	Hydrogen	.903-14 L.H.	0-160		1015-16AB	1405-20
V-0134	SR2434-982	VTS2234-982	Hydrogen	.903-14 L.H.	0-280		1015-17SB	1405-08
	SR2432-983	VTS2232-983	Hydrogen	.825-14 L.H.	0-75		1015-15MF	1008-01
	SR2433-983	VTS2233-983	Hydrogen	.825-14 L.H.	0-160		1015-16AB	1405-20
	SR2434-983	VTS2234-983	Hydrogen	.825-14 L.H.	0-280		1015-17SB	1405-08
*V-0135	*SR2335-973	*VTS2335-973	Argon or Helium	.965-14 R.H.	0-16	0-50	1015-18MF	1008-01
*V-0136	*SR2336-973	*VTS2336-973	Argon or Helium	.965-14 R.H.	0-35	0-100	1015-19AB	1405-20
*V-0137	*SR2337-973	*VTS2337-973	Argon or Helium	.965-14 R.H.	0-65	0-200	1015-20SB	1405-08

*Victrometers on these models are calibrated in both Argon and Helium.

**Victrometer only inlet connection "B" (9/16"-18 RH) (F), Hydrogen L.H. thread.
Victrometer outlet connections "B" (9/16"-18 RH) (M), Hydrogen L.H. thread.

VICTOR Regulator Adaptors



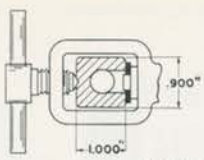
NOTE: Adaptors adapt from Regulator to Cylinder, such as 968-970—(968 is Regulator end, 970 is Cylinder end).

IDENTIFICATION AND PART NO.	REGULATOR CONNECTION THREAD —TO—	CYLINDER CONNECTION THREAD	GAS
960-969	.625-20 R.H. "Mc" Cyl.	.895-18 R.H. "Lit B" Cyl.	Acetylene
967-897	.903-14 R.H.	Medical Yoke 897-02A	Medical Oxygen, Nitrous Oxide
967-973	.903-14 R.H.	.965-14 R.H.	Nitrogen, Argon, Helium, Air (Water Pumped)
967-985	.903-14 R.H.	.825-14 R.H.	Oxygen
967-990	.903-14 R.H.	.850-14 R.H. (Canada)	Oxygen
968-969	.825-14 R.H. (Commercial)	.895-18 R.H. ("Lit B" Cyl.)	Acetylene
968-970	.825-14 R.H. (Commercial)	.885-14 L.H. (P.O.L.)	Acetylene, Propane
968-970L	.825-14 R.H. (Commercial)	.885-14 L.H. (P.O.L.) Linde Cyl.	Acetylene, Propane
968-991	.825-14 R.H. (Commercial)	.850-14 L.H. (Canada)	Acetylene
969-960	.895-18 R.H. "Lit B" Cyl.	.625-20 R.H. ("Mc" Cyl.)	Acetylene
969-968	.895-18 R.H. "Lit B" Cyl.	.825-14 R.H. (Commercial)	Acetylene
969-970	.895-18 R.H. "Lit B" Cyl.	.885-14 L.H. (P.O.L.)	Acetylene
970-968	.885-14 L.H. (P.O.L.)	.825-14 R.H. (Commercial)	Acetylene, Propane
970-968-1	.885-14 L.H. (P.O.L.)	.825-14 R.H. (Commercial)	Acetylene, Propane
970-969	.885-14 L.H. (P.O.L.)	.895-18 R.H. ("Lit B" Cyl.)	Acetylene
970-991	.885-14 L.H. (P.O.L.)	.850-14 L.H. (Canada)	Acetylene
973-967	.965-14 R.H.	.903-14 R.H.	Nitrogen, Argon, Helium, Air (Water Pumped)
974-982	.965-14 L.H.	.903-14 L.H. (L.H. Linde)	Nitrogen, Helium (Oil Pumped)
974-983	.965-14 L.H.	.825-14 L.H. (½ Pipe L.H.)	Hydrogen (Oil Pumped)
982-974	.903-14 L.H. (L.H. Linde)	.965-14 L.H.	Helium (Oil Pumped)
982-983	.903-14 L.H. (L.H. Linde)	.825-14 L.H. (½ Pipe L.H.)	Hydrogen
983-974	.825-14 L.H. (½ Pipe L.H.)	.965-14 L.H.	Hydrogen (Oil Pumped)
983-982	.825-14 L.H. (½ Pipe L.H.)	.903-14 L.H. (Linde L.H.)	Hydrogen
985-897	.825-14 R.H.	Medical Yoke 897-02A	Medical Oxygen
985-967	.825-14 R.H.	.903-14 R.H.	Medical Oxygen

Victor Regulator Inlet Connections

CONFORMS TO CGA STANDARDS UNLESS NOTED

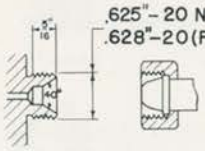
VICTOR 897 Type



CGA 860
Standard for Medical Gases
OXYGEN (MEDICAL)
NITROUS OXIDE
CARBON DIOXIDE
CYCLOPROPANE
ETHYLENE
HELIUM

Inlet No. 897-02B (Chrome)
897-01-C (Washer)
Yoke No. 897-02A (Chrome)
Yoke-Inlet Combination No. 897-02

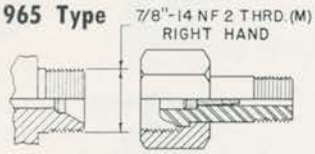
VICTOR 960 Type



CGA 200
Standard For
ACETYLENE
SMALL VALVE SERIES
MC TANK

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
960-01B[2,5]	1½	960-01A	0960-0103

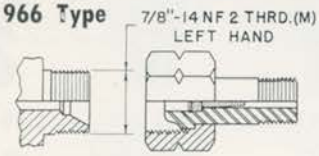
VICTOR 965 Type



CGA—None
OXYGEN AND INERT GASES
STATION REGULATORS

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0965-0101	2	0965-02	0965-0102

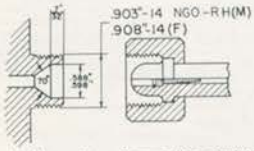
VICTOR 966 Type



CGA—None
ALL
FUEL GASES
STATION REGULATORS

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0965-0101	2	0966-02	0966-0102

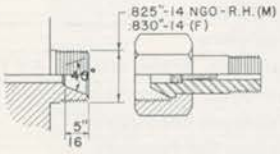
VICTOR 967 Type



CGA 540
Standard For
OXYGEN (Industrial)
OXYGEN (Medical)
NITROGEN (Not CGA)
ARGON (Not CGA)
AIR (Not CGA)

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0967-0101	2¼	967-02A	0967-0102
0967-0201	3	967-02A	0967-0202
0967-0301	5	967-02A	0967-0302
0967-0501 (Chrome)	2¼	967-03A	0967-0502
0967-0601 (Chrome)	3	967-03A	0967-0602
0967-1601[3]	2¼	967-06A	0967-1602
0967-1201[4]	2¼	967-06A	0967-1202
0967-2001[6]	2¼	967-06A	0967-2002
0967-2101	2¼	967-02A	0967-2102

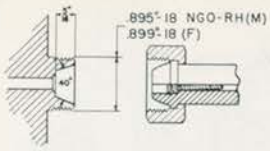
VICTOR 968 Type



CGA 300
Standard For
ETHYL CHLORIDE
Alternate Standard For
ACETYLENE
BUTANE—No. 2 Alternate
PROPANE—No. 2 Alternate

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0968-0101	2	968-01A	0968-0102
0968-0201	1⅝	968-01A	0968-0202

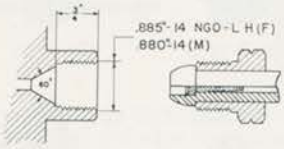
VICTOR 969 Type



CGA 520
Alternate Standard For
ACETYLENE
SMALL VALVE SERIES
B TANK

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
969-01B[5]	1¾	969-01A	0969-0103

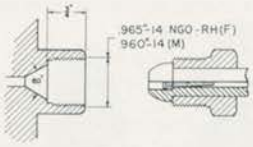
VICTOR 970 Type



CGA 510
Standard For
ACETYLENE
PROPANE
BUTANE
BUTADIENE
ETHYLENE-OXIDE
ISOBUTANE
PROPYLENE
CYCLOPROPANE (Industrial)

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0970-0101	3¼	970-01A	0970-0102
0970-0201	4½	970-01A	0970-0202
0970-0601	2⅜	970-01A	0970-0602

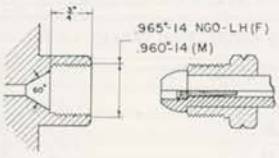
VICTOR 973 Type



CGA 580
Standard For
Water Pumped
AIR
ARGON
HELIUM
KRYPTON
NEON
NITROGEN
XENON

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0970-0101	3¼	973-01A	0973-0102
0970-0201	4½	973-01A	0973-0202
0970-0601	2⅜	973-01A	0973-0602

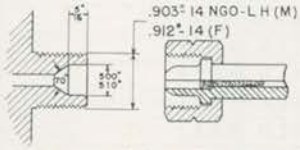
VICTOR 974 Type



CGA 590
Standard For
OIL PUMPED
AIR
ARGON
HELIUM
KRYPTON
NEON
NITROGEN
XENON
SULPHUR HEXOFLUORIDE

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0970-0101	3¼	974-01A	0974-0102
0970-0201	4½	974-01A	0974-0202
0970-0601	2⅜	974-01A	0974-0602

VICTOR 982 Type



CGA—None
Oil Pumped
HYDROGEN
AIR
NITROGEN

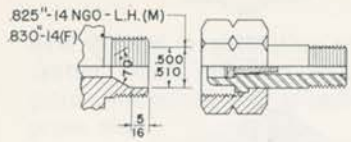
Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0967-0101	2¼	982-01A	0982-0102
0967-0201	3	982-01A	0982-0202
0967-0301	5	982-01A	0982-0302
0967-1601[3]	2¼	982-02A	0982-1602
0967-1201[4]	2¼	982-02A	0982-1202
0967-2001[6]	2¼	982-02A	0982-2002
0967-2101	2¼	982-01A	0982-2102

NOTE: All swivels include 0717-01 Filters and 0718-01 retaining ring, and ¼-18 NPT inlet threads, unless noted (1), (2), (3), etc.
(1) ⅜-18 NPT.
(2) Adaptor 961-01D has ¼-18 NPT (m) x 7/16-27(F). Swivel is 7/16-27(F) Thr'd.
(3) ½-14 NPT.
(4) Stainless for GD30, GD50 regulators ⅝-18 NS Thr'd inlet.
(5) No filter.
(6) Bronze, for GD61A, GD62 Regulators. ⅝-18 NS thread inlet.

Victor Regulator Inlet Connections

CONFORMS TO CGA STANDARDS UNLESS NOTED

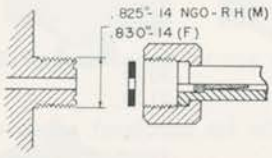
VICTOR 983 Type



CGA 350
Standard For
Carbon Dioxide
Ethylene Oxide Mixtures
Carbon Monoxide
Ethane
Ethylene (Industrial & Medical)
Hydrogen Methane
Alternate Standard For
Butane No. 1 Alternate
Ethylene Oxide
Helium (Oil Pumped)
Isobutane
Propane No. 1 Alternate
Propylene

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0983-0101	2¼	983-01A	0983-0102

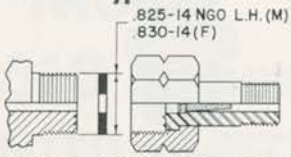
VICTOR 985 Type



CGA 320
Standard For
CARBON DIOXIDE
NITROUS OXIDE
OXYGEN (Medical)

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0985-01[5]	2	968-01A	0985-0103 (CO_2)
985-08B (Chrome)	2	968-02A (Chrome)	0985-0802 (Oxy.)
985-02C (Washer)			

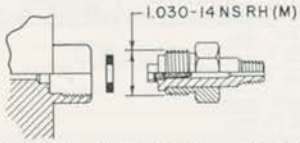
VICTOR 986 Type



CGA 330
Standard For
HYDROGEN SULPHIDE
BORON TRIFLUORIDE
HYDROGEN CHLORIDE
(Anhydrous)

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0985-06[5] (Stainless)	2	983-01A	0986-0103
1408-22 (Washer)			

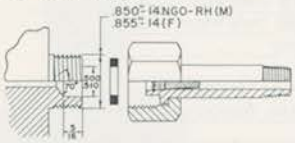
VICTOR 989 Type



CGA—None
Mexico Only
ACETYLENE

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0989-0101	2¼	989-01A	0989-0102
989-01C (Washer)			

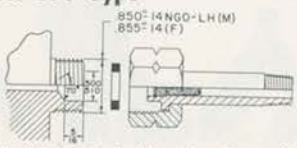
VICTOR 990 Type



CGA—None
Canada and Mexico
OXYGEN
(Industrial & Medical)

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0990-0201	2¼	990-01A	0990-0202
990-01C (Washer)			

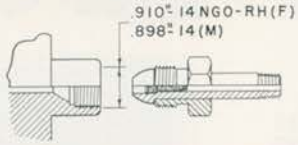
VICTOR 991 Type



CGA—None
Canada Only
ACETYLENE

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0990-0201	2¼	991-01A	0991-0202
990-01C (Washer)			

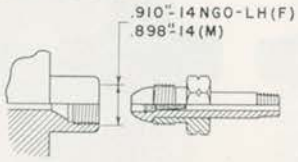
VICTOR 992 Type



CGA—None
British Only
OXYGEN

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0970-0101	3¼	992-01A	0992-0102

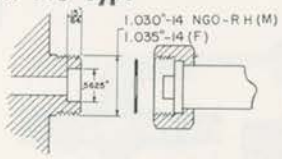
VICTOR 993 TYPE



CGA—None
British Only
ACETYLENE

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0970-0101	3¼	993-01A	0993-0102

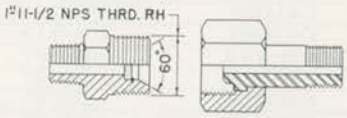
VICTOR 995 Type



CGA 660
Standard For
CHLORINE
DIFLUOROETHANE
DIFLUOROMONO-
CHLOROETHANE

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
995-01B[5] (Silver Pl.)	2½	995-01A	0995-0103
0995-02[5] (Hastalloy)	2½	995-01A	0995-0203
0995-03[5] (Stainless)	2½	995-01A	0995-0303
1408-23 (Washer, all above connections)			

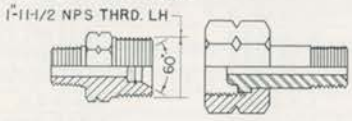
VICTOR 996 Type



CGA—None
VICTOR MANIFOLD AND
LARGE STATION REGULATOR
INLET FOR
OXYGEN
NITROGEN
AND INERT GASES

Inlet No.	Inlet Length	Connection Nut No.	Swivel-Nut Combination No.
0996-05[3] (Bushing)	2¼		
0996-07[3] (Swivel)	2½	0996-02	0996-08

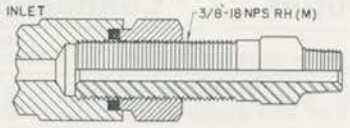
VICTOR 997 Type



CGA—None
VICTOR MANIFOLD AND
LARGE STATION REGULATOR
INLET FOR
ALL FUEL GASES

Inlet No.	Inlet Length	Connection Nut No.	Swivel-Nut Combination No.
0997-06[3] (Bushing)	2¼		
0996-07[3] (Swivel)	2½	0997-03	0997-09

VICTOR 998 Type



CGA 240
Standard For
AMMONIA
(Anhydrous)

Inlet Swivel No.	Swivel Length	Connection Nut No.	Swivel-Nut Combination No.
0998-01[5]	3-5/16	0998-02	0998-0103
1408-20 (Washer)			

NOTE: All swivels include 0717-01 Filters and 0718-01 retaining ring, and ¼-18 NPT inlet threads, unless noted (1), (2), (3), etc.
(1) ⅜-18 NPT.
(2) Adaptor 961-01D has ¼-18 NPT (m) x 7/16-27(F). Swivel is 7/16-27(F) Thr'd.
(3) ½-14 NPT.
(4) Stainless for GD30, GD50 regulators ⅝-18 NS Thr'd inlet.
(5) No filter.

VICTOR GAS CONTROL VALVES

1025
1125

1030
1130

1035
1135

1145

3925
3926

2025
2026

2030
2130

2125
2126

2010

2050
2150

1020

C12-01

0729-14

0729-15

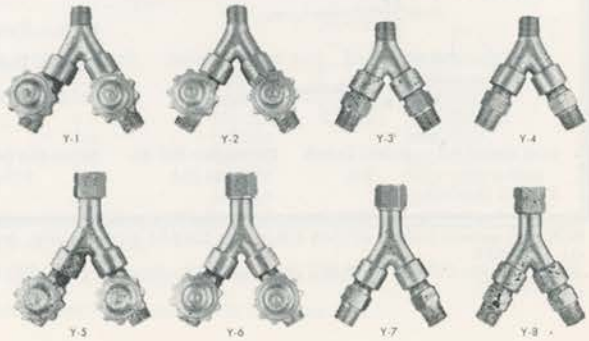
0729-17

0729-16

PART NUMBER	INLET THREAD SPECIFICATION	OUTLET THREAD SPECIFICATION	GAS-MARKING	REMARKS
1025	9/16-18 R.H.	1/4-18 NPT	Oxygen	Used on Std. Torches
1125	9/16-18 L.H.	1/4-18 NPT	Acetylene	Used on Std. Torches
1030	1/4-18 NPT	9/16-18 R.H.	Oxygen	Used on "Y's", etc.
1130	1/4-18 NPT	9/16-18 L.H.	Acetylene	Used on "Y's", etc.
1035	9/16-18 R.H.	1/8-27 NPT	Oxygen	Used on 100 Torches
1135	9/16-18 L.H.	1/8-27 NPT	Acetylene	Used on 100 Torches
1145	9/16-18 L.H.	1/8-27 NPT	Acetylene	Used on N600 Torches
2025	9/16-18 R.H.	1/4-18 NPT	Oxygen	Used on HD Torches
2026	9/16-18 R.H.	1/4-18 NPT	Air	Used on AG4 and AG6 Torches
2030	1/4-18 NPT	9/16-18 R.H.	Oxygen	
2130	1/4-18 NPT	9/16-18 L.H.	Acetylene	
2125	9/16-18 L.H.	1/4-18 NPT	Acetylene	Used on HD Torches
2126	9/16-18 L.H.	1/4-18 NPT	Gas	Used on AG4 and AG6 Torches
3925	9/16-18 R.H.	1/4" Tube Flare	Air	Used on 3900 Underwater Torch
3926	9/16-18 L.H.	1/4-18 NPT	Acetylene	Used on 3900 Underwater Torch
2050	9/16-18 R.H.	1/4-18 NPT (F)	Oxygen	Quick Opening
2150	9/16-18 L.H.	1/4-18 NPT (F)	Acetylene	Quick Opening
1020	1/4-18 NPT	.825-14 R.H.	CO_2	Carbon Dioxide Adaptation
2010	1/4-18 NPT	.825-14 R.H.	CO_2	Carbon Dioxide Adaptation
C12-01	1/4-18 NPT	3/8 I.D. Hose	CO_2	Petcock
0729-14	1/8-27 NPT (F)	1/4-18 NPT	Inlet	GD30 Regulators—Load, Replaces GD-20-03
0729-15	1/4-18 NPT (M)	1/8-27 NPT (F)	Outlet	GD30 Regulators—Bleed, Replaces GD20-04
0729-17	1/4-18 NPT (M)		Outlet	GD50 Regulators—Bleed, Replaces GD41-05
0729-16	1"-27 NS Thread (M)		Inlet	GD50 Regulators—Load, Replaces GD50-23

Regulator Outlet "Y" Connections

PART No.	GAS	INLET CONNECTION	OUTLET CONNECTION
Y1	Oxygen	1/4-18 NPT (M)	1030
Y2	Acetylene	1/4-18 NPT (M)	1130
Y3	Oxygen	1/4-18 NPT (M)	50-20
Y4	Acetylene	1/4-18 NPT (M)	60-20
Y5	Oxygen	9/16-18 R.H. (F)	1030
Y6	Acetylene	9/16-18 L.H. (F)	1130
Y7	Oxygen	9/16-18 R.H. (F)	50-20
Y8	Acetylene	9/16-18 L.H. (F)	60-20



MODEL 0600 SERIES

Safety Relief Valves

For Safety and Accuracy — Settings from 20 to 3000 Psi.

NEW DESIGN incorporating an improved principle of valve seating which allows a metal to metal contact between piston and nozzle that is sealed by a specially molded neoprene seat.

RELIABLE PROTECTION. This design gives positive relief action within 10% of the original setting.

PRECISION CONSTRUCTION assures accurate operation at all times.

APPLICATIONS. Recommended for use with oxygen, air and inert gases.

These valves can be furnished set with a lead seal to a specified pressure on request.

STANDARD (Brass)

MODEL	SETTING RANGE PSI
0600-0081	20-80
0600-0201	80-200
0600-0401	200-400
0600-0801	400-800
0600-2001	800-2000
0600-3001	1500-3000

MEDICAL (Chrome Plated)

MODEL	SETTING RANGE PSI
0600-0082	20-80
0600-0202	80-200
0600-0402	200-400
0600-0802	400-800
0600-2002	800-2000

All Models have a ¼" Male Pipe Thread Inlet Connection.

Model 0610 Series

VENTED SAFETY RELIEF VALVE

For Inflammable Gases

SPECIFY SETTING REQUIRED

MODEL	SETTING RANGE PSI
0610-0100	20-100
0610-0400	100-400
0610-1000	400-1000
0610-3000	1000-3000

This Safety Relief Valve is similar to the 0600 Series except that the discharged gases can be piped to the outside to prevent the accumulation of an explosive gas in a closed room. They are set by an adjusting screw under the top cap nut.

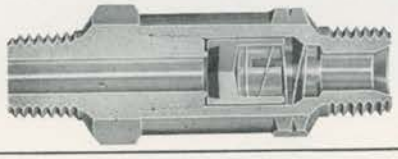
Model AV Series

LOW PRESSURE SAFETY RELIEF VALVES

These safety relief valves are used for low pressure applications that demand accurate and reliable protection. They may be used on any gas that is not corrosive to brass or aluminum.

MODEL	BODY MATERIAL	INLET CONNECTION	RANGE, P.S.I.
AV-113	Brass	¼-18" NPT (M)	5 to 20
AV-116	Aluminum	¼-18" NPT (M)	5 to 20

MODEL 60-26 BACK PRESSURE CHECK VALVE



For Acetylene Lines and Line Regulators

The 60-26 Check Valve is used on the small and medium size Line Station Regulators. This Check Valve can be employed in many applications where reverse flow is not desirable. Inlet—¼" male pipe. Outlet "B"—9/16"-18 L.H. (M).

REGULATOR OUTLET CONNECTIONS

50-20
A20-04
0950-23
0950-11
0950-0102
1122-06

60-20
A20-05
0960-23
1122-07

GD40-12

GD40-14
GD40-15

0950-0101
0950-10

0996-08
0997-09

HOSE CONNECTIONS

1002 9401
1003 9402
1004 9403
1005

1102
1103
1104
1105

1001

1101

1006
1007

1106
1107

1002S
1003S
1004S

1102S
1103S
1104S

910
912
914

909
911
913

898

0985-0203

962

1000

1100

HOSE SPLICERS

900
901
902

905
906
907
908

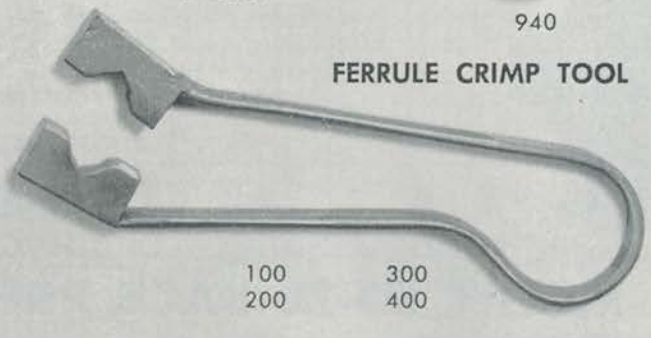
COUPLINGS, BUSHINGS

0916-02
0916-04

SR44-02

940

FERRULE CRIMP TOOL



100
200

300
400

FERRULES, HOSE CLAMPS

FF
HH
KK
625
769
9502
9505

7327
7330

9116
8337
8666
9940

0
1
2
3

VICTOR REGULATOR OUTLET CONNECTIONS

PART NUMBER	THREAD SPECIFICATIONS INTO REGULATOR	OUTLET	DESCRIPTION AND USE
50-20	¼-18 NPT (M)	"B" 9/16-18 RH (M)	Outlet Bushing—Standard on Oxygen Regulators
A20-04	⅜-18 NPT (M)	"B" 9/16-18 RH (M)	Outlet Bushing
0950-0102	¼-18 NPT (M)	"B" 9/16-18 RH (M)	Outlet Bushing—Medical Regulators—Chrome
0950-23	⅜-18 NPT (M)	"C" 7/8-14 RH (M)	Outlet Bushing—Standard on SR70 and VTS70 Oxygen Regulators
0950-11	¼-18 NPT (M)	"B" 9/16-18 RH (M)	Outlet Bushing—For LG-1001 w/15 Liter Gauge
1122-06	½-14 NPT (M)	"C" 7/8-14 RH (M)	Outlet Bushing for large Oxygen Station Regulators
60-20	¼-18 NPT (M)	"B" 9/16-18 LH (M)	Outlet Bushing—Standard on Acetylene Regulators
A20-05	⅜-18 NPT (M)	"B" 9/16-18 LH (M)	Outlet Bushing
0960-23	⅜-18 NPT (M)	"C" 7/8-14 LH (M)	Outlet Bushing—Standard on SR71 and VTS71 Acetylene Regulators
1122-07	½-14 NPT (M)	"C" 7/8-14 LH (M)	Outlet Bushing for large Fuel Gas Station Regulators
GD40-12	⅝-18 NF (M)	"B" 9/16-18 RH (M)	Outlet Bushing—GD30, GD31, GD50, GD61A, GD62 Regulators (also Inlet Conn.)
GD40-14	⅝-18 NF (M)	1/4-18 NPT (F)	Outlet Bushing—GD30, GD31, GD50, GD61A, GD62 Regulators (also Inlet Conn.)
GD40-15	⅝-18 NF (M)	3/8-18 NPT (F)	Outlet Bushing—GD30, GD31, GD50, GD61A, GD62 Regulators (also Inlet Conn.)
0916-10	⅝-18 NF (M)	½-14 NPT (F)	Outlet Bushing—GD30, GD31, GD50, GD61A and GD62 Regulators (also Inlet Conn.)
0950-10	¼-18 NPT (M)	"B" 9/16-18 RH (M)	Outlet Elbow—Medical Regulators w/15 Liter Gauge
0996-08	½-14 NPT (M)	1"-11½ NPS (F)	Outlet Connection—Manifold Regulators—All Gases

HOSE CONNECTIONS

NUT PLUS TAILPIECE COMBINATION PART NO.	NUT (ONLY) PART NO.	TAILPIECE (ONLY) PART NO.	THREAD SPECIFICATIONS	GAS	FITS HOSE I.D. SIZE	REMARKS
1002	1005A	1002B	"B" 9/16-18 R.H. (F)	Oxygen	3/16	Standard Ferrule Type
1003	1005A	1003B	"B" 9/16-18 R.H. (F)	Oxygen	1/4	Standard Ferrule Type
1004	1005A	1004B	"B" 9/16-18 R.H. (F)	Oxygen	5/16	Standard Ferrule Type
1005	1005A	1005B	"B" 9/16-18 R.H. (F)	Oxygen	3/8	Standard Ferrule Type
9401	9402-002	9401-001	"B" 9/16-18 R.H. (F)	Oxygen	3/16	Standard Ferrule Type Chrome
9402	9402-002	9402-001	"B" 9/16-18 R.H. (F)	Oxygen	1/4	Standard Ferrule Type Chrome
9403	9402-002	9403-001	"B" 9/16-18 R.H. (F)	Oxygen	5/16	Standard Ferrule Type Chrome
1102	1105A	1002B	"B" 9/16-18 L.H. (F)	Acetylene	3/16	Standard Ferrule Type
1103	1105A	1003B	"B" 9/16-18 L.H. (F)	Acetylene	1/4	Standard Ferrule Type
1104	1105A	1004B	"B" 9/16-18 L.H. (F)	Acetylene	5/16	Standard Ferrule Type
1105	1105A	1005B	"B" 9/16-18 L.H. (F)	Acetylene	3/8	Standard Ferrule Type
1001	1001A	1001B	"A" 3/8-24 R.H. (F)	Oxygen	3/16	Standard Ferrule Type "J" Torch
1101	1101A	1001B	"A" 3/8-24 L.H. (F)	Acetylene	3/16	Standard Ferrule Type "J" Torch
1006	0965-02	0901-11	"C" 7/8-14 R.H. (F)	Oxygen	1/2	Standard Ferrule Type
1007	0965-02	0901-10	"C" 7/8-14 R.H. (F)	Oxygen	3/8	Standard Ferrule Type
1106	0966-02	0901-11	"C" 7/8-14 L.H. (F)	Acetylene	1/2	Standard Ferrule Type
1107	0966-02	0901-10	"C" 7/8-14 L.H. (F)	Acetylene	3/8	Standard Ferrule Type
1002S	1005A	1002SB	"B" 9/16-18 R.H. (F)	Oxygen	3/16	Screw Type
1003S	1005A	1003SB	"B" 9/16-18 R.H. (F)	Oxygen	1/4	Screw Type
1004S	1005A	1004SB	"B" 9/16-18 R.H. (F)	Oxygen	5/16	Screw Type
1102S	1105A	1002SB	"B" 9/16-18 L.H. (F)	Acetylene	3/16	Screw Type
1103S	1105A	1003SB	"B" 9/16-18 L.H. (F)	Acetylene	1/4	Screw Type
1104S	1105A	1004SB	"B" 9/16-18 L.H. (F)	Acetylene	5/16	Screw Type
910			"B" 9/16-18 R.H. (M)	Oxygen	3/16	Screw Type
912			"B" 9/16-18 R.H. (M)	Oxygen	1/4	Screw Type
914			"B" 9/16-18 R.H. (M)	Oxygen	5/16	Screw Type
909			"B" 9/16-18 L.H. (M)	Acetylene	3/16	Screw Type
911			"B" 9/16-18 L.H. (M)	Acetylene	1/4	Screw Type
913			"B" 9/16-18 L.H. (M)	Acetylene	5/16	Screw Type
898	969-01A	898-01B	"969" 895-18 R.H. (F)	Acetylene	1/4	Ferrule Type "Lit B" Cyl.
0985-0203	968-01A	985-09B	"985" 825-14 R.H. (F)	CO_2	3/8	Ferrule Type Uses 985-02C Washer
962	960-01A	962-01B	"960" 625-20 R.H. (F)	Acetylene	1/4	Ferrule Type "Mc" Tank
1000			"B" 9/16-18 R.H. (M)	Oxygen	Any	Hose Coupling
1100			"B" 9/16-18 L.H. (M)	Acetylene	Any	Hose Coupling

HOSE SPLICERS

PART NUMBER	FOR SPLICING HOSE I.D.	TYPE
900	3/16 to 3/16	Ferrule Type
901	1/4 to 1/4	Ferrule Type
902	5/16 to 5/16	Ferrule Type
905	3/16 to 3/16	Screw in Type
906	3/16 to 1/4	Screw in Type
907	1/4 to 1/4	Screw in Type
908	5/16 to 5/16	Screw in Type

COUPLINGS, BUSHINGS

PART NUMBER	THREAD SPECIFICATIONS ONE END	OTHER END	REMARKS
0916-04	3/8-18 NPT (M)	3/8-18 NPT (M)	
0916-02	1/4-18 NPT (M)	1/4-18 NPT (M)	Replaces 984 Connection
SR44-02	3/8-18 NPT (M)	1/4-18 NPT (F)	
940	1/2-14 NPT (M)	1/4-18 NPT (M)	

FERRULES, HOSE CLAMPS, FERRULE CRIMP TOOL

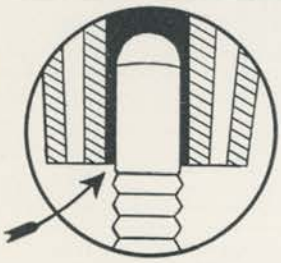
PART NUMBER	USE WITH HOSE I.D.	DUAL OR SINGLE HOSE	1 OR 2 BRAID	DESCRIPTION
*625	1/4	Dual	1	Ferrule 17/32" x 1/2" Long
769	3/16	Either	1	Ferrule 7/16" I.D. x 9/16" Long
KK	1/4	Either	1	Ferrule 9/16" I.D. x 1/2" Long
HH	1/4	Single	2	Ferrule 21/32" I.D. x 1/2" Long
7327	1/4	Either	1 & 2	Ferrule 5/8" I.D. x 1" Long
FF	5/16	Either	2	Ferrule 21/32" I.D. x 1/2" Long
7330	5/16	Either	2	Ferrule 23/32" I.D. x 1" Long
9505	3/16	Single	1	Ferrule 7/16" I.D. x 9/16" Long Chrome
9502	1/4	Single	2	Ferrule 21/32" I.D. x 1/2" Long Chrome
9116	3/16	Dual	1	Band 7/16" x 7/8" Oval
8337	1/4	Dual	1	Band 19/32" x 1-1/4" Oval
8666	5/16	Dual	1	Band 23/32" x 1-5/16" Oval
*9940	1/4	Dual	2	Band 17/32" x 1-1/16"
0	3/16	Dual	1	Clamp—Adjustable
1	3/16 or *¼	Single and *	1 & 2	Clamp—Adjustable
2	1/4	Either	1 & 2	Clamp—Adjustable
3	5/16	Either	1 & 2	Clamp—Adjustable
100	3/16	Both	1 & 2	Crimping Tool
200	1/4	Dual	1	Crimping Tool
300	1/4	Single	2	Crimping Tool
300	5/16	Dual	1	Crimping Tool
400	5/16	Single	1 & 2	Crimping Tool

*New small diameter dual hose.

Pressure Gauges

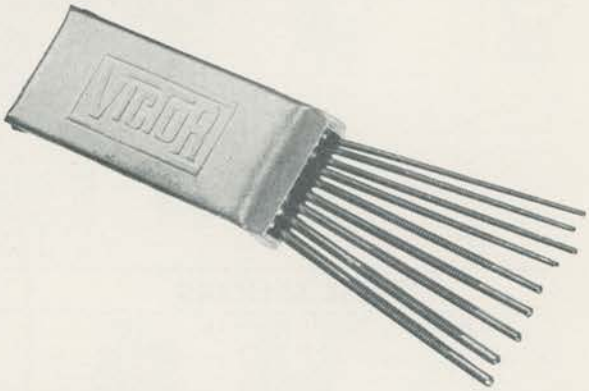
PRESSURE P.S.I.	DIAL SCALE GRADUATIONS PSI (Brass Gauges Only)	2" DIAL			2½" DIAL			2½" DIAL, STAINLESS STEEL SOCKET AND BOURDON TUBE BLACK CASE
		BRASS	BLACK	CHROME	BRASS	BLACK	CHROME	
30	½	√	√		√			√
60	1		√		√			
100	2	√	√		√			√
200	5	√	√		√	√		√
400	5	√			√			√
600	20	√			√			
1000	25				√			√
1500	25				√			
3000	100	√		√	√		√	√
*4000	100	√			√			
5000	100				√			
10,000	200				√			
15 liter	¼ liter			√			√	

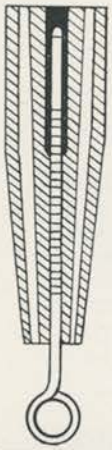
*Will replace 3000 lb. gauge when adopted as industry standard.



WYPO Tip Cleaners

WYPO keeps the tip on the job and your money in your pocket!





These stainless steel **Wypo** Tip Cleaners will not injure cutting or welding tip ports by scratching or deforming.

WYPO TIP CLEANER SET No. 1 contains 12 tip cleaners covering drill sizes 75 to 49. For VICTOR (or equivalent) welding tip sizes 000 to 4; VICTOR (or equivalent) cutting tip preheating ports tip sizes 000 to 10 and oxygen jets of tip sizes from 000 to 3; in metal container.

WYPO TIP CLEANER SET No. 2 contains 9 tip cleaners covering drill sizes 48 to 30. For VICTOR (or equivalent) welding tip sizes 5 to 7 and VICTOR (or equivalent) cutting tip oxygen jets of tip sizes 4 to 7; in metal container.

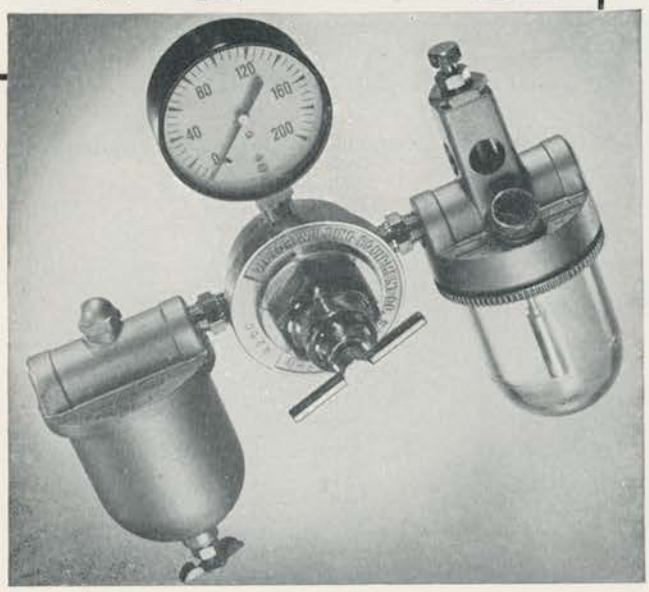
Welding Cable Connectors

The VICTOR Cable Connector is fully insulated, and accommodates cable sizes up to 00—it's quickly detachable and connectable — it's just the cable connector you want.

PART NO. COMPLETE ASSEMBLY	COLOR	MALE END ONLY	FEMALE END ONLY
9503	Black	9503-002	9503-001
9504	Red	9504-002	9504-001

FOR AIR-OPERATED TOOLS AND MACHINERY

PNEUMATIC CONTROLS BY VICTOR



FILTER. The VICTOR Air Filter is scientifically designed to remove dirt, pipe scale and condensation from the air supply. A porous, sintered bronze element provides maximum impurity trapping action with minimum air flow resistance (approximately 3 p.s.i. per 10 c.f.m.). The filter inlet is designed to deflect the incoming air in a downward spiral motion which throws the condensation and impurities to the outer shell and below the lower deflector where they are trapped until removed through the petcock at the bottom of the bowl. The filter can be readily disassembled for complete cleaning by the removal of the top body nut. The filter is available with either a steel or plastic bowl. The metal bowl is recommended for installations involving rough usage. The tough, durable plastic bowl is desirable because it provides full view of filtering action, showing condition of the air line and when to drain filter.

REGULATOR. The VICTOR R250 and R375 Air Regulators are a new design especially suited for intermittent duty with air tools and air operated machinery. One of the features of this regulator is a specially developed seat and nozzle unit which provides excellent, trouble-free performance under a wide range of working conditions. Details of these regulators are fully illustrated and explained on page 45 of this catalog.

LUBRICATOR. The VICTOR Lubricator provides a dependable and accurate source of wear-protecting lubrication for all types of air equipment such as chucks, screw drivers, grinders, hoists, chipping hammers, air cylinders, etc.

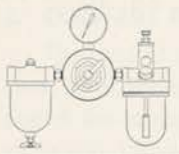
1. **Visual Setting** of the lubrication rate results in correct oiling without guessing. The precision needle valve provides a wide range of accurate and consistent oil flow to the air line under operating conditions.

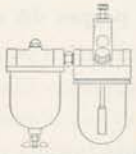
2. **Reliable Lubrication Rate.** The VICTOR Lubricator is designed to eliminate air locking and overfeeding of oil into the line when the air flow stops or fluctuates. A filter in the oil feed line insures a constant flow of clean oil to the metering valve at all times.

3. **The Visual Oil Supply Cup** is made of a durable and tough plastic with a safety factor of 5 times the recommended maximum working pressure of 125 p.s.i. It has a ⅓-pint capacity.

4. **Oil Cup Easy to Fill.** Refilling can readily be accomplished through the filler plug without shutting off the air supply. The oil cup can be removed for cleaning or filling without shutting down the air supply, if the filler plug is removed before loosening the cup retaining nut.

SPECIFICATIONS — MODEL COMBINATIONS

	MODEL NO.	WEIGHT
 FRL	FRL-250 (Steel Bowl)	5 lb. 14 oz.
	FRL-375 (Steel Bowl)	5 lb. 14 oz.
	FRL-250P (Plastic Bowl)	5 lb. 14 oz.
	FRL-375P (Plastic Bowl)	5 lb. 14 oz.
F	F-250 (Steel Bowl)	1 lb. 7 oz.
	F-375 (Steel Bowl)	1 lb. 7 oz.
	F-250P (Plastic Bowl)	1 lb. 7 oz.
	F-375P (Plastic Bowl)	1 lb. 7 oz.
R	R-250	2 lb. 14 oz.
	R-375	2 lb. 14 oz.
L	L-250	1 lb. 9 oz.
	L-375	1 lb. 9 oz.

	MODEL NO.	WEIGHT
 FL	FL-250 (Steel Bowl)	3 lb.
	FL-375 (Steel Bowl)	3 lb.
	FL-250P (Plastic Bowl)	3 lb.
	FL-375P (Plastic Bowl)	3 lb.
FR	FR-250 (Steel Bowl)	4 lb. 5 oz.
	FR-375 (Steel Bowl)	4 lb. 5 oz.
	FR-250P (Plastic Bowl)	4 lb. 5 oz.
	FR-375P (Plastic Bowl)	4 lb. 5 oz.
RL	RL-250	4 lb. 7 oz.
	RL-375	4 lb. 7 oz.

All 250 Models have ¼"-18 NPT (F) Inlet and Outlet Connections.

All 375 Models have ⅜"-18 NPT (F) Inlet and Outlet Connections.

NOTE: All Filters, Regulators, and Lubricators listed have left hand inlets. If right hand inlet is desired, place "R" after the model number.

VICTOR HIGH PRESSURE GAS DISCHARGING MANIFOLDS

DESIGNED FOR SAFETY. All VICTOR manifolds are of substantial construction with a design and materials suitable for the particular gas and service which they are to be used. Safety features are incorporated to insure protection for personnel and property.

FORGED FITTINGS. All fittings, such as tees, elbows and valves, are forged brass parts designed for at least 10,000 lbs. or 5 times the maximum cylinder pressure to which they are subjected. Seamless extra heavy duty pipe is used in all pipe type headers.

MOUNTING. The manifold is so constructed that it can be readily mounted in sections. The coupling joints are designed to compensate for some misalignment in mounting without putting a strain on any of the parts.

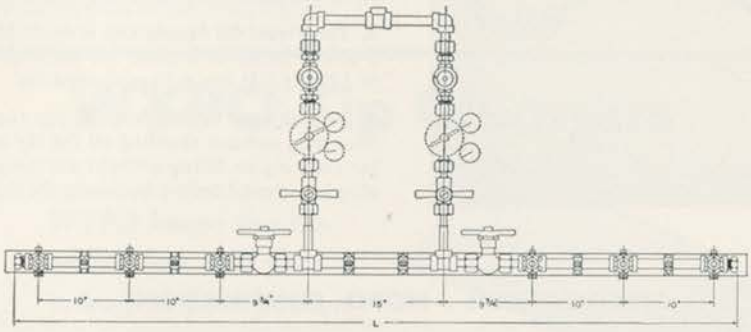
MASTER VALVES. Master valves with large capacities are used to divide the manifold into two sections, allowing uninterrupted service. One-half the manifold may be serviced and put into operation while the other half is discharging.

EVERY MANIFOLD TESTED. Every VICTOR manifold is tested at 2000 p.s.i. to insure absolute gas tight joints.

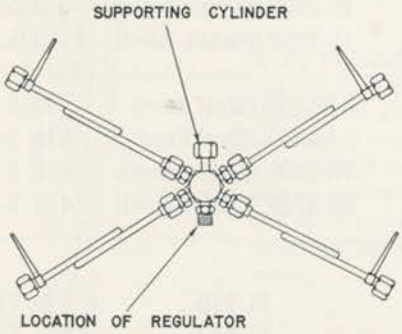
CUSTOM BUILT MANIFOLDS. VICTOR EQUIPMENT COMPANY is prepared to build manifolds to meet any particular requirement.

ENGINEERING SERVICE and advice on the installation of manifold systems is another VICTOR service.

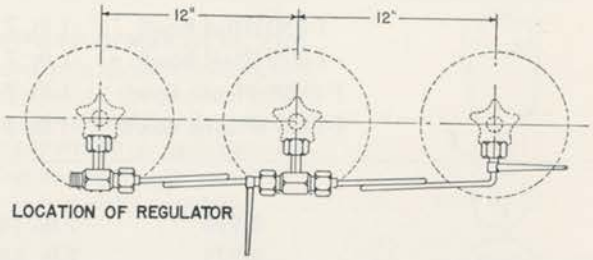
Illustrated below are three typical types of manifolds offered by VICTOR



MODEL 1100 SERIES Type "B" Discharging Manifold, 6 cylinders with shut-off valve. Available for Oxygen, Acetylene, Nitrogen, Air, Helium, Hydrogen, etc. Refer to pages 46 and 49 for manifold regulators.



MODEL 1152 SERIES Self-Supporting Manifolds for Oxygen, Acetylene, Nitrogen, Carbon Dioxide, etc.



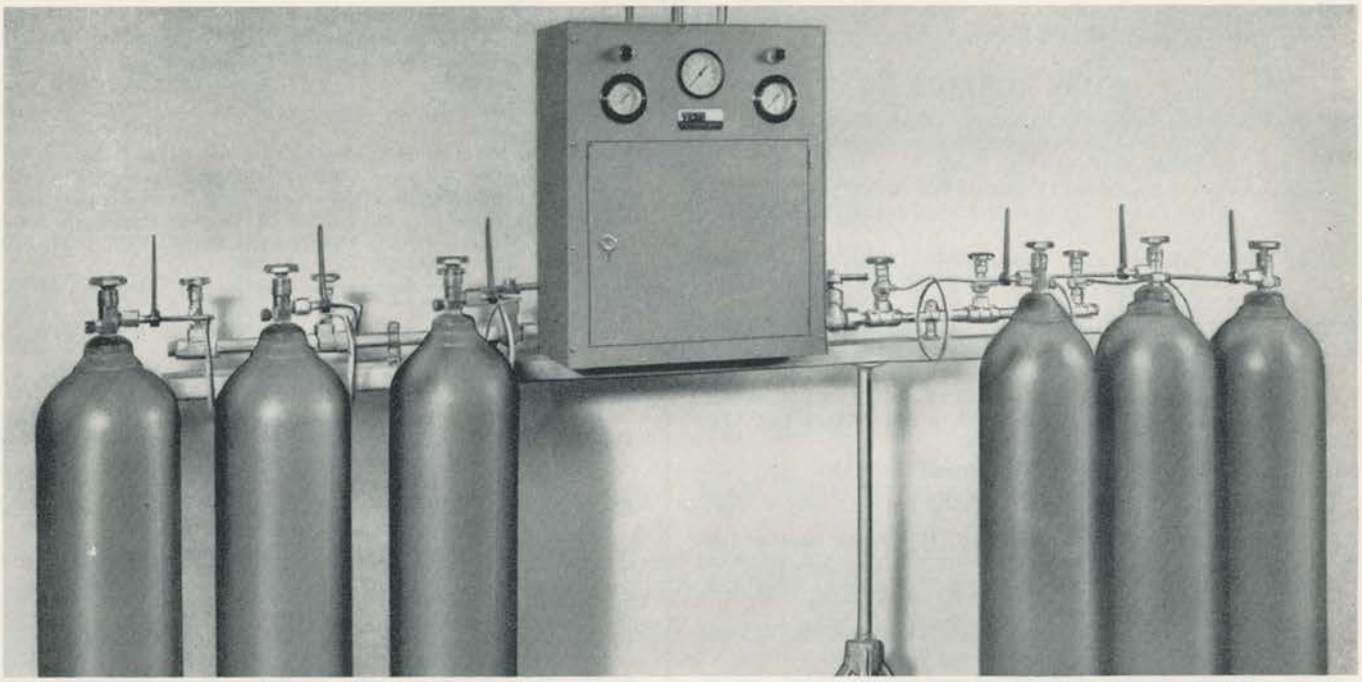
MODEL 1150 SERIES Self-Supporting Extendable Type Manifold for Oxygen, Acetylene, Hydrogen, Nitrogen, etc.

Select suitable regulator with cylinder inlet connection starting on page 40.

For further information and complete specifications on VICTOR High Pressure Gas Discharging Manifolds write for manifold bulletin.

VICTOR Completely Automatic Manifold

Model 1100-50 Series



1. NO ADJUSTMENTS—Simply replace empty cylinders.

There are no levers, valves, or regulators to adjust after the automatic switch-over from empty to full bank is completed. The only service necessary for continuous operations is the replenishment of empty cylinders. The control box is provided with a lock to prevent tampering of the preset automatic controls by unauthorized personnel.

2. CONSTANT DELIVERY PRESSURE—even during switch-over.

The control is designed to produce a non-fluctuating line pressure at all times, regardless of changes in cylinder bank pressure, or at change-over when the reserve bank cuts in. Delivery will continue even during electrical power interruption. If one of the master regulators should become inoperative (which may occur in any manifold system) the system will continue to deliver through the other regulator. These features make this control especially suited for hospital or industrial installations where a constant gas supply is essential.

3. SAFE—DEPENDABLE OPERATION—assured by proven principals and components.

The complete control is composed of standard time proven units, such as Victor Two-Stage VTS70M Regulators, Mercoid Pressure Switches, and similar established standard control units.

4. INDICATING PANEL—easily read.

The pressure gauges and red signal lights located at either side of the panel indicate the pressure condition of each bank. Each light flashes on when its bank is empty and remains on until the cylinders are replaced with full ones. Additional visual or audible signals may be connected in parallel with these lights. The large gauge in the center indicates the pressure in the distribution system.

5. FLEXIBILITY—can be set from 25 to 150 p.s.i. delivery.

The control can be set to deliver a constant pressure in a range from 25 to 150 p.s.i. Desired Pressure setting should be specified on order. Higher pressures up to 300 p.s.i. delivery can be furnished on special order.

The control panel only can be installed in most manifolds with 1″ - 11½ NPS union connections.

6. For details, request Form AM-1.

VICTOR Apparatus Repair Tools

Number	Description

CONE END ASSEMBLY PLUGS

RT-21	Cutting Attachment Models 450, C1450 and 2450
RT-22	550-J Cutting Attachments
RT-23	550-100 and C1450-100 Cutting Attachments

TUBE CLAMPS

RT-61	Acetylene Tubes 400-21, 400-22, 420-05, 430-04, 440-05 and 450-12; and for Rear H.P. Oxygen Tubes 420-11, 440-07 and C400-05 (9/16" O.D. Tube)
RT-62	Acetylene Tube 1400-17, 1400-18 and 1400-24; and for J20-03 Barrel (.584" O.D. Special Ribbed Tubing) (not pictured; same as RT-6)
RT-63	H. P. Oxygen Tubes 400-14, 400-15, 420-03, 430-12, 440-02, 1400-06, 1400-07, 1400-13, 1400-25 and 3900-06 (7/16" O.D. Tube)
RT-64	H. P. Oxygen Tubes 450-03, 460-08, C400-01 , C1400-01, C1450-10; and Inner Oxygen Tubes 300-07, 310-03, and 315-03 (1/8" IPS)
RT-66	Inner Oxygen Tubes 100-05, 400-19, 400-20, 420-04, 430-03, 440-04, 450-11, 1400-15, 1400-16 and 1400-26 (1/4" O.D. Tube)
RT-67	550-06 Acetylene Tube (1/2" Turned Diameter)
RT-68	Barrels 1400-09 and 1400-10 (1-3/16" O.D. Special Ribbed Tubing)
RT-69	Barrels 300-03, 310-01 and 315-01 (1/2" Alpha Extruded Tubing—27/32" O.D.)
RT-70	Barrels 100-03, 600-03, J28-02, J30-03 and J50-01 (.740" O.D. Special Ribbed Tubing)
RT-74	Mixing Chamber Tubes 400-16, 400-46, 400-49, 450-04, 2450-06 and 2450-07 (29/64" Turned Diameter)
RT-75	Mixing Chamber Tubes 440-03 and 460-03 (29/64" Turned Diameter)
RT-76	Mixing Chamber Tubes (3/8" Turned Diameter)
RT-71	H.P. Oxygen Tube 500-05; and for Inner Oxygen Tube P310-03 (5/16" O.D. Tube)

WRENCHES, PLIERS, Etc.

RT-12	Spring Housing Cap Wrench—VTS40-14 and V50-02
RT-13	Spring Housing Cap Wrench—SR70-02, SVJ90-01
RT-14	Pressure Gauge Shank Wrench
RT-15	Ball Housing Wrench—V Regulator Series
RT-16	Housing Wrench—S Regulator Series (Obsolete Models)
RT-17	H.P. and L.P. Valve Assembly Socket Wrench—VTS40 Regulator Series
RT-18	Body Jig Wrench for VTS85, VTS95, VTS20, VTS20MS, VTS20MP, VTS20ML and 8301 (Medical) Regulator Series
RT-19	Box Wrench for Back Plugs—A10, A20, C10, SR40, SR44, SR90, SR95 and 7300 (Medical) Regulator Series; and for GD41-02 and VTS85-07 Spring Housing Cap
RT-20	General Service Wrench for Regulators and Torches.
RT-47	Spiral Mixer Wrench for All Cutting Torches and Cutting Attachments (except Model 550 Below Serial Number 40,000)
RT-48	Box Wrench for Cutting Attachment Coupling Nut 450-17
RT-49	Needle Valve Removing Wrench for Needle Valve Models 460-11, 1030, 1130, 1145, 1025, 1125
RT-50	Wrench for J Series Welding Torches and 550 Cutting Attachment
RT-51	Welding Torch Head Wrench for Welding Torch Series 300 and Model 100
RT-53	9010 Ferrule Assembly Tool
RT-54	Type 1 Mixer Pliers
RT-55	Commercial Acetylene Tank Key
RT-56	POL Acetylene Tank Key
RT-77	Small Tank Wrench (Medical)
RT-79	Needle Valve Removing Wrench for Models 2025, 2026, 2125, 2126, 2030 and 2130
RT-80	Wrench for 3401 Torch

Number	Description

REAMERS

RT-8	Seat Guide Reamer for Regulator Model SVJ91 (Obsolete Model) (not pictured)
RT-9	H.P. Seat Guide Reamer for VTS40 Regulator Series
RT-10	Nozzle Reamer for Regulator Body—A10 Series
RT-11	Nozzle Reamer for Regulator Body—A20 Series
RT-28	Acetylene Hose Connection Reamer for J Welding Torch Series
RT-29	Oxygen Hose Connection Reamer for J Series Torch
RT-30	Standard Acetylene Needle Valve Hose Connection Reamer
RT-31	Standard Oxygen Needle Valve Hose Connection Reamer
RT-33	L.P. Valve Seat Reamer for all Cutting Torches; all Cutting Attachments; and Needle Valve Models 1020, 1025, 1030, 1035, 1125, 1130, 1135 and 3925
RT-35	Needle Valve Reamer for Welding Torch Models J20, J30, J40 and J50
RT-36	Needle Valve Reamer for Welding Torch Models J27, J28, and 3401
RT-37	Acetylene Needle Valve Seat Reamer for Welding Torch Model P310
RT-38	H.P. Valve Seat Refacing Tool for Series 400, 410, 1400, CTS400 and CTS1400 Hand Cutting Torches; Series 420, 430, 440, 460, 470 and 480 Machine Cutting Torches; and Cutting Torch C400.
RT-39	H.P. Valve Seat Refacing Tool for Cutting Attachment Models 450, C1450, C1450-100, and 2450
RT-40	H.P. Valve Seat Refacing Tool for Cutting Attachment Model 550
RT-41	H.P. Valve Seat Refacing Tool for Hand Cutting Torch Series 1000 and 2000
RT-42	H.P. Valve Seat Refacing Tool for all Machine Torches with Wheel-type H.P. Valve
RT-52	Reseating Tool for Needle Valve Models 2010, 2025, 2125, 2026, 2126, 2030, 2130 and 5101
RT-57	Head Reamer Assembly used on Hand Cutting Torch Series 400, 410, 1400, 2000 (except C1400 and C2000) and Model 3900; Machine Cutting Torch Series 420, 430, 440, 460, 470, 480; and Cutting Attachment Models 450 and 2450
RT-58	Head Reamer Assembly used on 300 Series Welding Torches; on C400, C1400, C2000 Cutting Torches, and on Cutting Attachments C1450-100 and C1450
RT-59	Head Reamer Assembly used on 550 Cutting Attachment; and on J Series Welding Torches
RT-60	Head Reamer Assembly used on Model 100 and Model 3401 Torches
RT-78	H.P. Valve Seat Refacing Tool for 400-HD, 1400-HD, 420-HD, 430-HD, 440-HD, 470-HD and 480-HD Torch Series
RT-83	Reamer (1145 Valve Body—0301 Victrometer)
RT-84	Reamer (Regulator Nozzle Seat Reamer) for VN50 and VN60 Series; SR40 Series; SR90 Series; and VTS40 on High Side, Regulators
RT-102	Valve Seat Reamer for "V" Series

HOLDING JIGS

RT-7	SR40, SR44, VN and VTS40 Regulator Series
RT-6	A10, C10, SR90, SR95, SSR95, 7300 Regulator Series

INLET SWIVEL ASSEMBLY PLUGS

RT-1	982	RT-82	969	RT-91	960
RT-2	983	RT-85	973	RT-92	986
RT-3	968	RT-86	974	RT-93	992
RT-4	967	RT-87	965	RT-94	993
RT-5	970	RT-88	966	RT-95	995
RT-81	985	RT-89	990	RT-96	996
		RT-90	991	RT-97	998

VICTOR HAND AND MACHINE CUTTING DATA

RECOMMENDED RANGE OF CUTTING TIP SIZES FOR:	THICKNESS OF STEEL INCHES	TIP SIZE NUMBER Small	Medium	Large	OXYGEN PRESSURE P.S.I. Min.	Max.	OXYGEN CONSUMPTION C.F.H. Min.	Max.	ACETYLENE PRESSURE P.S.I.	ACETYLENE CONSUMPTION C.F.H. Min.	Max.	CUTTING SPEED INCHES PER MIN. Min.	Max.
3 HOSE MACHINE CUTTING TORCH	1/64 to 1/8		000		5	20	30	60	5	6	11	20	35
HEAVY DUTY AND 2 HOSE MACHINE CUTTING TORCHES	1/8	000	00	0	5	25	50	100	5	7	15	20	35
"STANDARD" CUTTING TORCHES	1/4	00	0	1	7	25	60	110	5	9	18	15	30
"C" CUTTING TORCHES	3/8	00	0	1	7	30	60	120	5	10	20	15	25
2450 CUTTING ATTACHMENT	1/2	0	1	2	10	35	65	130	5	12	25	12	25
C1450 CUTTING ATTACHMENT	5/8	0	1	2	13	38	80	150	5	13	27	12	22
550 CUTTING ATTACHMENT	3/4	1	2	3	15	40	100	160	5	15	28	12	20
	1	1	2	3	20	45	120	180	6	17	30	10	20
	1 1/2	2	3	4	25	50	150	225	6	18	35	8.0	17
	2	2	3	4	30	55	175	275	7	20	45	6.0	15
	3	3	4	5	35	60	225	375	7	22	47	5.0	12
	4	3	4	5	40	65	325	475	8	25	50	4.0	10
	5	4	5	6	45	70	375	550	8	27	58	4.0	8.0
	6	4	5	6	45	75	425	650	9	30	60	3.0	6.5
	8	5	6	7	50	80	625	750	9	33	63	2.5	5.0
	10	6	7	8	55	85	625	900	10	35	65	2.0	4.0
	12	6	7	8	60	90	725	1050	10	37	68	2.0	3.5
	14	7	8	9	55	100	825	1200	11	40	70	2.0	3.0
	16	7	8	9	60	110	950	1300	12	42	73	1.5	3.0
	18	8	9	10	65	120	1050	1450	12	45	75	1.5	3.0
	20	9	10	12	80	130	1150	1550	13	50	80	1.5	3.0
	24	12	14		90	140	1350	1750	14	50	80	1.5	3.0
	28	14	16		100	150	1650	2400	15	60	85	1.0	2.5

SELECTION OF TIP SIZE: This table is intended to be used as a guide for selection of the proper size cutting tip and for approximate operational data. Under the heading "Tip Size" there are generally three tips listed that can be used for a particular thickness of steel. The "Medium" size tip will give the most economical results when used by the average operator.

SPEED AND ECONOMY FACTORS: Maximum cutting speeds and economy are affected by a number of variable factors; the highest speed and lowest gas consumptions will be made by experienced operators on good, clean metal and long cuts, using the correct tip and operating pressures. Dirty metal, short cuts, poor material, wrong tip size and operating pressures will result in the lowest speed and cutting economy.

HEAVY CUTTING SUGGESTIONS: When cutting heavy sections, the oxygen pressures can be reduced from those shown in the table if large I.D. hose (3/8" to 1/2"), large capacity regulators (SR70, VTS 70), large capacity three hose torches (4000 Series), and an adequate manifolded oxygen supply are used.

PRESSURE CONNECTIONS: The pressures in the above table are at the regulator and approximate when using 25 feet of 1/4 I. D. hose. Add about one pound for each additional 25 feetof hose.

VICTOR CUTTING TIP AND TIP CLEANER SIZES

For Cutting Oxygen Orifices

TIP SIZE*	CUTTING OXYGEN ORIFICE SIZE* DRILL NO.	DIAMETER	USE TIP CLEANER NO. DRILL	WYPO	TIP SIZE*	CUTTING OXYGEN ORIFICE SIZE* DRILL NO.	DIAMETER	USE TIP CLEANER NO. DRILL	WYPO
000	72	.025	73	8	6	35	.110	36	42
00	65	.035	66	12	7	28	.140	29	.....
0	58	.042	59	16	8	20	.161	21	.....
1	54	.055	55	22	9	11/64	.171	18	.....
2	52	.063	53	24	10	3/16	.187	13	.....
3	50	.070	51	26	12	7/32	.218	3	.....
4	45	.082	46	30	14	1/4	.250	D	.....
5	40	.098	41	37	16	9/32	.281	K	.....

*Regardless of Type, all Victor Cutting Tips except scarfing, gouging and deseaming tips have the same cutting oxygen orifice size.

NOTE: The information on these pages is available in Wall Chart Form 334, suitable for shop use.

Victor Cutting Tip PRE-HEAT AND CUTTING ORIFICE SIZES

TIP SIZE	Cutting Oxygen Orifice Size (Same for All Types except scarfing, etc.)	PRE-HEAT SIZES FOR THE VARIOUS TYPES OF TIPS																				
		1-100 3-100 5-100 4-Hole	1-101 3-101 5-101 6-Hole	1-103 1-104 8-Hole	1-105 8-Hole	1-108 3-108 6-Hole	1-110 3-110 5-110 1-Hole	1-111 2-Hole	1-112 2-Hole	3-112 2-Hole	1-115 6-Hole	1-116 3-116 6-Hole	1-117 8-Hole	1-118 3-118 6-Hole	1-119 8-Hole	1-126 12-Hole	1-129 6-Hole	1-200 3-200 5-200 8-Hole	1-202 12-Hole	1-204 12-Hole	1-207 8-Hole	1-209 12-Hole
000	72	75	75															69				
000½	69	75	75																			
00	65	75	75				65	67	67		66							67				
0	58	73	75			75	60	64	60		64			73				67				
1	54	69	73			73	56	60	56	60	56	70					73	64			56	
2	52	58	66			66	54	56	53	56	55	66		64			66	62			55	
3	50	56	64			64	53	54	52	54	54	64					64	60			54	
4	45	56	61			61		53	52		53	61		56			61	56			53	
5	40		56								53	56					56	55			53	
6	35		55								52	56		58				54			53	
7	28		54										63						55			
8	20			55									63	58					54	54		
9	11/64			55																		
10	3/16			55									61		57	57				52		51
12	7/32				54								55		56	55				51		47
14	1/4				54																	
16	9/32				54																	

WELDING TIP SIZE AND APPLICATION DATA

TIP SIZE	DRILL SIZE	LENGTH OF AVERAGE INNER FLAME CONE	OXYGEN PRESSURE P.S.I.		ACETYLENE PRESSURE P.S.I.		ACETYLENE CONSUMPTION C.F.H.*		METAL THICKNESS
			Min.	Max.	Min.	Max.	Min.	Max.	
000	75	7/32"	½	2	½	2	½	3	Up to 1/32"
00	70	7/32"	1	2	1	2	1	4	1/64"-3/64"
0	65	3/8"	1	3	1	3	2	6	1/32"-5/64"
1	60	3/8"	1	4	1	4	4	8	3/64"-3/32"
2	56	3/8"	2	5	2	5	7	13	1/16"-1/8"
3	53	3/8"	3	7	3	7	8	36	1/8"-3/16"
4	49	5/8"	4	10	4	10	10	41	3/16"-1/4"
5	43	1"	5	12	5	15	15	59	1/4"-1/2"
6	36	1-1/16"	6	14	6	15	55	127	1/2"-3/4"
7	30	1-1/4"	7	16	7	15	78	152	3/4"-1-1/4"
8	29	1-1/4"	9	19	8	15	81	160	1-1/4"-2"
9	28	1-7/16"	10	20	9	15	90	166	2"-2-1/2"
10	27	1-7/16"	11	22	10	15	100	169	2-1/2"-3"
11	26	1-7/16"	13	24	11	15	106	175	3"-3-1/2"
12	25	1-1/2"	14	28	12	15	111	211	3-1/2"-4"

*Oxygen consumption is 1.1 times the acetylene under neutral flame conditions.

The orifice size of any particular Victor Welding Tip is the same regardless of type of nozzle.

Gas consumption data is merely for rough estimating purposes. It will vary greatly on the material being welded and the particular skill of the operator.

Pressures are approximate for hose length up to 25 feet. Increase for longer hose lengths about 1 p.s.i per 25 feet.

NOTE: The information on these pages is available in Wall Chart Form 334, suitable for shop use.

VICTOR for welding

MUNSELLE SUPPLY CO. INC.
1004 East First Street KI 2-0612
Santa Ana, California

VICTOR EQUIPMENT COMPANY

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